DOCUMENT RESUME

ED 037 056 EM 007 647

TITLE	Upper Susequehanna Regional Supplementary Educational Service Center. Final Report; Narrative.
INSTITUTION	Broome County School District, N.Y.
PUB DATE	21 Aug 69
GRANT	OEG-1-6-000416-0297
NOTE	142p.
AVAILABLE FROM	Upper Susquehanna Regional Supplementary Educational Service Center, Broome County Board of Cooperative Educational Services, 1136 Front Street, Binghamton, N. Y. 13905
EDRS PRICE	EDRS Price MF-$0.50 HC-$7.20
DESCRIPTORS	Educational Experiments, Educational Programs, Instructional Innovation, *Mobile Educational Services, Program Administration, Program Design, Program Improvement, Progressive Education, *Schools, *Special Education, *Special Programs, Special Services

ABSTRACT

The final report of the Roberson Center Title III Project, establishing the Upper Susquehanna Regional Supplementary Educational Service Center, includes a complete description of the teaching activities, finances, organization and programs of the experimental project. The central purpose of the project was to provide, through various practical means, the maximum opportunity for school children and teachers to have direct, personal experience and involvements with the visual and performing arts and related humanities, and other areas. Activities in addition to portable displays, films and slide shows, included portable theater workshops, performances of the Binghamton Symphony and Symphonette, a ballet, and a planetarium. Overall attendance was in excess of 750,000 persons. Complete details of schools and funding is provided, along with two professional evaluations, one of them praising the project as the most comprehensive and capably administered in his experience. (BB)

ED037056

ROBERSON CENTER
30 Front Street Binghamton New York 13905

UPPER SUSQUEHANNA REGIONAL
SUPPLEMENTARY EDUCATIONAL
SERVICE CENTER

OPERATIONAL PROJECT: OE 66-416
GRANT # OEG1-6-000416-0297
NEW YORK STATE
March 21, 66 - May 31, 69

FINAL REPORT

III.

EM007 647

4381 (REV 2/67)

DEPARTMENT OF HEALTH, EDUCATION AND WELFARE
OFFICE OF EDUCATION
WASHINGTON D.C. 20202

BUDGET BUREAU NO. 51-R600
APPROVAL EXPIRES 6/30/68

ESEA TITLE III STATISTICAL DATA
Elementary and Secondary Education Act of 1965 (P.L. 89-10)

THIS SPACE FOR U.S.O.E. USE ONLY →	PROJECT NUMBER	VENDOR CODE	COUNTY CODE	REGION CODE	STATE ALLOTMENT

SECTION A - PROJECT INFORMATION

1. REASON FOR SUBMISSION OF THIS FORM *(Check one)*

A ☐ INITIAL APPLICATION FOR TITLE III GRANT
B ☐ RESUBMISSION
C ☐ APPLICATION FOR CONTINUATION GRANT
D ☒ END OF BUDGET PERIOD REPORT

2. IN ALL CASES EXCEPT INITIAL APPLICATION. GIVE OE ASSIGNED PROJECT NUMBER

66-416

3. MAJOR DESCRIPTION OF PROJECT: *(Check one only)*

A ☐ INNOVATIVE
B ☐ EXEMPLARY
C ☐ ADAPTIVE

4. TYPE(S) OF ACTIVITY *(Check one or more)*

A ☐ PLANNING OF PROGRAM
B ☐ PLANNING OF CONSTRUCTION
C ☐ CONDUCTING PILOT ACTIVITIES
D ☐ OPERATION OF PROGRAM
E ☐ CONSTRUCTING
F ☐ REMODELING

5. PROJECT TITLE *(5 Words or Less)*

6. BRIEFLY SUMMARIZE THE PURPOSE OF THE PROPOSED PROJECT AND GIVE THE ITEM NUMBER OF THE AREA OF MAJOR EMPHASIS AS LISTED IN SEC. 303, P.L. 89-10. *(See instructions)*

ITEM NUMBER ____________

7. NAME OF APPLICANT *(Local Education Agency)*

8. ADDRESS *(Number, Street, City, State, Zip Code)*

Previous address:
768 Chenango Street, Binghamton, N.Y. 13901

9. NAME OF COUNTY

10. CONGRESSIONAL DISTRICT

11. NAME OF PROJECT DIRECTOR

12. ADDRESS *(Number, Street, City, State, Zip Code)*

PHONE NUMBER

XXXXXXXX

AREA CODE

13. NAME OF PERSON AUTHORIZED TO RECEIVE GRANT *(Please type)*

Broome County Board of
Cooperative Educational
Services

14. ADDRESS *(Number, Street, City, State, Zip Code)*

1136 Front Street
Binghamton, N.Y.

PHONE NUMBER

723-8302

AREA CODE

607

15. POSITION OR TITLE

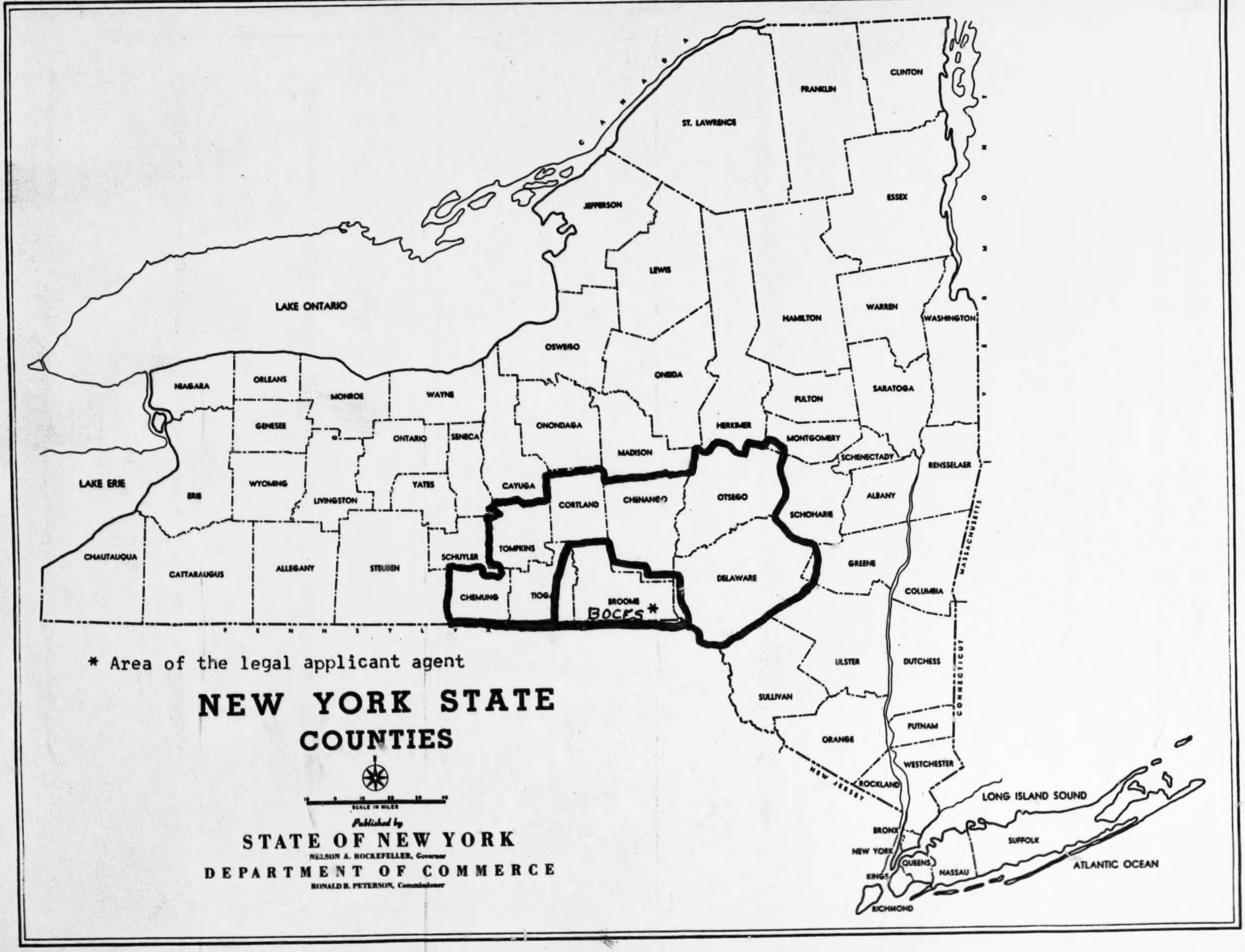
President

SIGNATURE OF PERSON AUTHORIZED TO RECEIVE GRANT

T. Merrell Churchill

DATE SUBMITTED

8-21-69


LAKE ONTARIO
LAKE ERIE
CANADA
VERMONT
MASSACHUSETTS
CONNECTICUT
NEW JERSEY
PENNSYLVANIA
LONG ISLAND SOUND
ATLANTIC OCEAN
ST. LAWRENCE
FRANKLIN
CLINTON
ESSEX
JEFFERSON
LEWIS
HAMILTON
WARREN
WASHINGTON
OSWEGO
ONEIDA
HERKIMER
FULTON
SARATOGA
NIAGARA
ORLEANS
MONROE
WAYNE
GENESEE
ONTARIO
SENECA
ONONDAGA
MADISON
MONTGOMERY
SCHENECTADY
RENSSELAER
ERIE
WYOMING
LIVINGSTON
YATES
CAYUGA
CORTLAND
CHENANGO
OTSEGO
SCHOHARIE
ALBANY
CHAUTAUQUA
CATTARAUGUS
ALLEGANY
STEUBEN
SCHUYLER
TOMPKINS
CHEMUNG
TIOGA
BROOME
BOCES *
DELAWARE
GREENE
COLUMBIA
ULSTER
DUTCHESS
SULLIVAN
ORANGE
PUTNAM
WESTCHESTER
ROCKLAND
BRONX
NEW YORK
KINGS
QUEENS
NASSAU
SUFFOLK
RICHMOND
SCALE IN MILES

* Area of the legal applicant agent

NEW YORK STATE
COUNTIES

Published by

STATE OF NEW YORK
NELSON A. ROCKEFELLER, Governor
DEPARTMENT OF COMMERCE
RONALD B. PETERSON, Commissioner

L-416

SECTION A – Continued

16. LIST THE NUMBER OF EACH CONGRESSIONAL DISTRICT SERVED: 33 - 27

17A. TOTAL NUMBER OF COUNTIES SERVED: 8

B. TOTAL NUMBER OF LEA'S SERVED: 85

C. TOTAL ESTIMATED POPULATION IN GEOGRAPHIC AREA SERVED: 675,000

18. LATEST AVERAGE PER PUPIL ADA EXPENDITURE OF LOCAL EDUCATION AGENCIES SERVED: $ 900.00 estimated

SECTION B – TITLE III BUDGET SUMMARY FOR PROJECT (Include amount from item 2c below)

1.		PREVIOUS OE GRANT NUMBER	BEGINNING DATE *(Month, Year)*	ENDING DATE *(Month, Year)*	FUNDS REQUESTED
A.	Initial Application or Resubmission	▨			$
B.	Application for First Continuation Grant				$
C.	Application for Second Continuation Grant				$
D.	Total Title III Funds	▨	▨	▨	$
E.	End of Budget Period Report	OEG-1-6-000416-0297	3-21-66	5-31-69	▨

2. *Complete the following items only if this project includes construction, acquisition, remodeling, or leasing of facilities for which Title III funds are requested. Leave blank if not appropriate.*

A *Type of function (Check applicable boxes)*

1 ☐ REMODELING OF FACILITIES 2 ☐ LEASING OF FACILITIES 3 ☐ ACQUISITION OF FACILITIES

4 ☐ CONSTRUCTION OF FACILITIES 5 ☐ ACQUISITION OF BUILT-IN EQUIPMENT

B 1. TOTAL SQUARE FEET IN THE PROPOSED FACILITY ____________

2. TOTAL SQUARE FEET IN THE FACILITY TO BE USED FOR TITLE III PROGRAMS ____________

C AMOUNT OF TITLE III FUNDS REQUESTED FOR FACILITY $____________

SECTION C – SCHOOL ENROLLMENT, PROJECT PARTICIPATION DATA AND STAFF MEMBERS ENGAGED

1.			PRE-KINDERGARTEN	KINDERGARTEN	GRADES 1 - 6	GRADES 7 - 12	ADULT	OTHER	TOTALS	STAFF MEMBERS ENGAGED IN IN-SERVICE TRAINING FOR PROJECT
A	School Enrollment in Geographic Area Served	(1) Public		9468	75821	62910			148,199	▨
		(2) Non-public							12,908	▨
B	Persons Served by Project	(1) Public		0	223943	436466			660,409	
		(2) Non-public		0	33462	65219			98,681	
		(3) Not Enrolled					1684		1,684	▨
C	Additional Persons Needing Service	(1) Public								
		(2) Non-public								
		(3) Not Enrolled								▨

2.	TOTAL NUMBER OF PARTICIPANTS BY RACE *(Applicable to figures given in item IB above)*	WHITE	NEGRO	AMERICAN INDIAN	OTHER NON-WHITE	TOTAL
		745,059	15,215	0	500	760,774

Based on student experience

SECTION C - continued

3. RURAL/URBAN DISTRIBUTION OF PARTICIPANTS SERVED OR TO BE SERVED BY PROJECT

PARTICIPANTS	RURAL		METROPOLITAN AREA		
	FARM	NON-FARM	CENTRAL-CITY	NON-CENTRAL CITY	OTHER URBAN
PERCENT OF TOTAL NUMBER SERVED	6	16	21	12	45

SECTION D - PERSONNEL FOR ADMINISTRATION AND IMPLEMENTATION OF PROJECT

1. PERSONNEL PAID BY TITLE III FUNDS

TYPE OF PAID PERSONNEL	REGULAR STAFF ASSIGNED TO PROJECT			NEW STAFF HIRED FOR PROJECT		
	FULL-TIME 1	PART-TIME 2	FULL-TIME EQUIVALENT 3	FULL-TIME 4	PART-TIME 5	FULL-TIME EQUIVALEN 6
A. ADMINISTRATION/ SUPERVISION		5	2,3	1	4	2
B. TEACHER:						
(1) PRE-KINDERGARTEN						
(2) KINDERGARTEN						
(3) GRADES 1-6						
(4) GRADES 7-12						
(5) OTHER						
C. PUPIL PERSONNEL SERVICES						
D. OTHER PROFESSIONAL						
E. ALL NON-PROFSSIONAL						
F. FOR ALL CONSULTANTS PAID BY TITLE III FUNDS →	(1.) TOTAL NUMBER RETAINED 15			(2.) TOTAL CALENDAR DAYS RETAINED 106-1/2		

2 PERSONNEL NOT PAID BY TITLE III FUNDS

TYPE OF UNPAID PERSONNEL	REGULAR STAFF ASSIGNED TO PROJECT			NEW STAFF HIRED FOR PROJECT		
	FULL-TIME 1	PART-TIME 2	FULL-TIME EQUIVALENT 3	FULL-TIME 4	PART-TIME 5	FULL-TIME EQUIVALEN 6
A. ADMINISTRATION/ SUPERVISION						
B. TEACHER:						
(1) PRE-KINDERGARTEN						
(2) KINDERGARTEN						
(3) GRADES 1 TO 6						
(4) GRADES 7-12						
(5) OTHER						
C. PUPIL PERSONNEL SERVICES						
D. OTHER PROFESSIONAL						
E. ALL NON-PROFESSIONAL						
F. FOR ALL CONSULTANTS NOT PAID BY TITLE III FUNDS →	(1.) TOTAL NUMBER RETAINED ______			(2.) TOTAL CALENDAR DAYS RETAINED ______		

SECTION E - NUMBER OF PERSONS SERVED OR TO BE SERVED AND ESTIMATED COST DISTRIBUTION

		MAJOR PROGRAM OR SERVICES	TOTAL NUMBER SERVED OR TO BE SERVED PRE-K (1)	K (2)	1-6 (3)	7-12 (4)	ADULT (5)	OTHER (6)	NONPUBLIC SCHOOL PUPILS INCLUDED (7)	ACTUAL ~~ESTIMATED~~ COST (8)
1.		EVALUATIVE PROGRAMS								
	A	Deficiency Survey (Area Needs)								
	B	Curriculum Requirements Study (Including Planning for Future Need)								76,396.51
	C	Resource Availability and Utilization Studies								
2.		INSTRUCTION AND/OR ENRICHMENT								
	A	Arts (Music, Theater, Graphics, Etc.)								374,286.07
	B	Foreign Languages								
	C	Language Arts (English Improvement)								
	D	Remedial Reading	Total number of students enrolled including non-public was approximately 161,000. Total number of student experiences was approximately 761,000. In addition, we had programs attended by 1700 adult teachers. The breakdown requested by Section E cannot be supplied with any reasonable accuracy. Sufficient raw data was not supplied by many of the participating districts.							
	E	Mathematics								
	F	Science								29,721.29
	G	Social Studies/Humanities								38,160.35
	H	Physical Fitness/Recreation								
	I	Vocational/Industrial Arts								9,437.17
	J	Special-Physically Handicapped								
	K	Special-Mentally Retarded								
	L	Special-Disturbed (Incl. Delinquent)								
	M	Special-Dropout								
	N	Special-Minority Groups								
3.		INSTRUCTION ADDENDA								
	A	Educational TV/Radio								20,333.73
	B	Audio-Visual Aids								
	C	Demonstration/Learning Centers	Mobile Field Labratory for Conservation							5,738.39
	D	Library Facilities								
	E	Material and/or Service Centers								
	F	Data Processing								
4.		PERSONAL SERVICES								
	A	Medical/Dental								
	B	Social/Psychological								
5.		OTHER Administrative costs, fixed charges and equipment							$	156,888.4

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

UPPER SUSQUEHANNA REGIONAL SUPPLEMENTARY EDUCATIONAL SERVICE CENTER

FINAL REPORT - NARRATIVE

The work presented or reported herein was performed pursuant to a Grant from the U.S. Office of Education, Department of Health, Education, and Welfare. However, the opinions expressed herein do not necessarily reflect the position or policy of the U.S. Office of Education, and no official endorsement by the U.S. Office of Education should be inferred.

The printing and duplication of this Report has been financed by other than Federal funds.

UPPER SUSQUEHANNA REGIONAL SUPPLEMENTARY
EDUCATIONAL SERVICE CENTER
Broome County Board of Cooperative
Educational Services
1136 Front Street, Binghamton, N.Y. 13905

OPERATIONAL PROJECT No. OE 66-416
GRANT NUMBER OEG1-6-000416-0297

NEW YORK STATE
March 21, 1966 - May 31, 1969

FINAL REPORT

I **Major Objectives:** The original Application stated the major objectives -

> *"The central purpose of this project is to offer the feasible maximum of opportunities for school children and their teachers to have direct, personal experience and involvements with the realities of the visual and performing arts and related literature, history (especially regional history), scientific discoveries, specimens and principles, the affairs of the world, the universe of occupations and other facets of the sciences, the arts and humanities. By carefully coordinating those elements, the project proposes to propagate an understanding of the unity of human knowledge, experience and expression while achieving a wider distribution of excellence."*

A *"the feasible maximum"* .... a necessary qualification. In addition to the specific programs provided, the Project undertook to ascertain the maximum regional area that can effectively and economically be served by a single management unit. The nature and highest quality of resources that could be mobilized to provide the various facets of the program and the regional disposition of the student populations and school districts served are factors of paramount concern. Since there were no precedents, this objective in itself has been innovative. In addition to qualitative criteria, logistics, scheduling and units-of-service costs have been given special attention. Statistical and cost analyses are included in this Report.

i.e. It was recognized there would be a limit to the number of students that a fixed Planetarium (seating 70-90) operating at capacity could serve. Among the determining factors are distance-time for busing and the time-physical capacity of the facility and staff. The outcome provides hard data for the long range determination of the locations of other similar facilities within this region or other regions. Such factors are useful, also, in the design, under consideration by Roberson Center, of a mobile planetarium. Such information could eliminate unnecessary capital and operational investments by school districts.

On the other hand, it was recognized that certain types of exhibits and the performing groups, by their mobility, could be assembled, scheduled and delivered more effectively and economically over a very wide region by a single management source.

B Evaluation of results -

1) At least two objective commentaries on each unit of program delivered were required of the respective schools served. In addition, the performers and creative directors of each element of program were asked to assess their effectiveness with their various school, college and adult audiences. Further, an estimated 15 percent of the programs were monitored by members of the Center staff.

2) The first formal external evaluation was provided by Robert E. Armstrong, Associate, Special Studies, Rockefeller Brothers Fund in April of 1967. Copy included in this Report.

3) The second formal external evaluation was a ten-day study made by John Carr Duff, Professor of Educational Administration, New York University and Hofstra, November, 1967. Professor Duff was selected by the Title III Office, New York State Education Department. Copy included with this Report.

4) The third external evaluation was made in 1968 by a study team (Drs. J.R.Egner, W.L. Lowe and Frederick H. Stutz, Department of Education, Cornell University) in the course of a larger examination of the educational needs and resources of a wide region in central New York State. Pertinent excerpts included in this Report.

5) A study group of teachers in the social sciences devoted a one-day session to evaluating the touring exhibits with reference to their effectiveness in their area of instruction. The reactions were positive to enthusiastic and stimulated imaginative suggestions for additional materials.

6) The primary thrust of evaluation, however, lies in the widespread expressions of approval and the acceptance of the program by the students, faculties and administrations in the districts served. With regard to the schools themselves, the number of them (265) is our evidence of cooperation. It is safe to say that of the schools which participated in the programs, more than half of them responded directly

to our bi-weekly Newsletter and preference forms sent out. The rest resulted from further communications from this office in an effort to reach as many school districts as possible within the feasibility of the itineraries of the touring groups.

BRIEF SUMMARY-BY CATEGORIES-OF PROGRAM DELIVERED

Project Period: March 21, 1966 - May 31, 1969
Details in the Appendices

Category	No. of Units *		Attendance	
"Portable Phoenix" (Theatre)	296		106,548	
Workshops	519		15,570	
Hibbitt-Savoca Opera	129		47,440	
Workshops	13		390	
Binghamton Symphony	31		5,215	
Binghamton Symphonette	54		13,449	
Briansky Ballet	166		59,914	
Young Audiences Ensembles	456		129,504	
John Covelli, Pianist	46		14,264	
Arthur Schrader,Singing History	31	1,741	7,626	399,920
Exhibits	2,549		318,625	
Planetarium	463		21,585	
Art Portfolios	105		6,300	
Films	187		11,220	
Wildflower Slides	2		90	
Trail Signs, Nature Study	1		120	
Mobile Field Lab	27		810	
Seminars-Workshops, teachers and Students	25	3,359	2,104	360,854
Total units delivered		5,100	attendance	760,774

*Where more than one school participated, the performance is counted a unit for each.

* * * * * * * * * * * *

When the performing arts programs were presented, three evaluation forms were sent along with the confirmation forms and background study material. The schools were asked to have three adult observers at the program and during any additional educational services performed in the school. Those observers, and any others which the school might designate, were to complete the evaluation forms and return them to the Center. In almost all cases this was done and the overwhelming consensus has been favorable to an enthusiastic degree for all of the programs. There has been some healthy positive criticism of certain details of some of the program - such as difficulty with a foreign accent, or failure to get all of the supporting material in time for advance preparation, or disappointment at not having more time with the artists, or feeling that one grade or another was not yet ready for the experience.

The participants in the programs (professionals) were asked to report on their observations and reactions to student and teacher response as well as to operational procedures and the effectiveness of explanatory and study materials. Their observations are included in this Report. Distinct differences were discovered in the total "atmosphere and climate of receptiveness" characterizing the various schools and the widely varying student body reactions. A sustained examination of the underlying causes for this is essential to the production of effective study materials for preparation and follow-up.

Approximately one-third of the first 329 program engagements were attended and observed by members of the professional staff of the Center for the same purposes. This practice has been especially useful in "evaluating the local evaluations".

With respect to the school exhibits, the primary purpose is to supplement material in the school curriculum. The range of subject area and topics requested by the schools indicate that the exhibits, as well as the educational performances, have helped to stimulate a growing concern for education in the humanities.

In each case the circulating exhibit is designed to:

1. Supply as much information in limited classroom space, without losing continuity or neatness of appearance.
2. To be easy to handle and move without special equipment or manpower.
3. When possible the exhibit is designed to enable the student to handle the exhibit material, thus bringing the learning experience as close to the student as possible through vision, touch and smell.

The school exhibits are designed to fit in the curriculum of the New York State Syllabi. Exhibits are placed in the classroom or learning situation for one week, unless requested by the school for two weeks. As the existing exhibits are duplicated and new exhibits are produced, duration of use in each situation will be automatically extended to two weeks. Interpretive material, such as teachers' handbooks and supplementary printed material has been produced.

ROBERSON CENTER SUMMER CONFERENCES
SEMINARS, WORKSHOPS AND PRESENTATIONS

the quiet one
Photography - William E. Watson

professionals in
music, art, drama, and educators, psychologists, researchers join in seeking new media, insights and resources for the teacher-performers in guiding the young toward discovery.

Merely playing good music well is not enough. As successful as such programs may be, they can be improved. Performers, educators and consultants from many fields began an effort to gain the insights and develop the resources for improvement.

Their objective is to transfer discussions of the discovery method from theory to specifies, to define important areas and outline definite suggestions for the artist who performs in the educational settings and seeks the maximum involvement of the young in the experience.

A task force of eighteen social studies teachers spent a day at the Center discussing and evaluating the exhibits. They gave unqualified approval of the exhibits and have asked for more material in the teachers' guide.

Such comments have been received as: "Excellent interpretive devices," "First time children have been able to touch historical objects," "Motivated many students to do extra reading and research on the subject," "Created interest throughout the school."

One unexpected dividend has been the stimulation of students and adults to assemble exhibits locally, using materials on hand and in the attics, especially in the fields of history and natural science.

This casual evaluation process has been helpful. Though widely used, it is however, a method that has relatively insignificant value in reaching substantiated measurement of, and conclusions regarding, changes achieved.

The development of a more objective and formalized evaluation process to measure the results and effectiveness of the programs was initiated in a Pilot Conference, summer 1967. The results were encouraging and a second Conference-Workshop was held in the summer of 1968. New directions in content and presentation came to light and research and development will continue. Evaluation of the lasting values engendered by a program of this nature cannot be meaningful and conclusive in less than ten, perhaps twenty, years.

One positive indicator of the success of the program was the comment of one school principal, "All I can tell you is that books are moving out of our library that have never moved before. My students are talking about things they have never been interested in before. We have got a healthier climate for learning. Things that they used to know only from textbooks are coming alive to them."

The "feasible maximum opportunity" has been an approximately 95 percent coverage of the schools in the region with a number of programs of the highest possible standards. This constitutes an introduction to the type and quality of program which can be developed and delivered as a related and coordinated supplementary experience.

C Costs of Evaluations - Since Professor Duff was the only evaluator requiring a fee, the total costs have been relatively small. Including some expenses of travel, the total is estimated at $2,500.

II Results that Measured Up, or Did Not Measure Up, to Expectations:

It's easier to tell of those aspects of our program with which we were disappointed than it is to tell of those where we had a resounding success. Largely our disappointment centered around two minor aspects of our efforts in Conservation Education.

A. We had prepared by Cornell University, working with some upper elementary children, a series of Wildflower Slides with an accompanying narrative manuscript with built-in flexibility. We thought, since there were logical divisions: protected wildflowers, wildflowers that may be picked in limited quantities and flowers that are very abundant, that the slides would make for a logical introductory lesson for a field trip on the part of upper elementary or early secondary children. However, the slides did not catch on. It may be that we've done a poor job of describing them or it may be that we just have not had them long enough for teachers to realize their full value.

B. We had the same organization prepare trail signs to be used by teachers in the preparation of field trips. These, too, were seldom used despite considerable effort to disseminate their values. Our assumption is that teachers find it difficult to get time enough to adequately plan and to lay out a trail. This is an all-day job for many of them.

On the whole, we were, however, pleased with our conservation efforts and with the schools' response to those efforts. Since the report requires us to make a judgement, we will state that our most successful efforts have been in three areas:

A. In the Performing Arts. All school systems have been most appreciative of our efforts. Beginning with an attitude that treated visiting groups as "just another assembly," the great majority of cooperating schools have come to accept Performing Arts as a most desirable adjunct to the total educational effort. Most of the chief school administrators are now recognizing that the Performing Arts group, when the school does its preparatory and follow-up work can become an integral and very valuable part of the total ongoing curriculum.

Our expectations for the project were exceeded most specifically in the effective additional educational services which some of the performing groups were able to offer to the schools. Notable among these were The Portable Phoenix Theatre with its classroom readings, seminars on drama and subjects related to the theatre, theatre games and drama workshops and the Young Audiences ensembles some of whom gave instrumental clinics to music students in the junior and senior high schools. The Opera Company supplemented its performances with experimental vocal clinics, rehearsals with school choral groups, and informal on-stage discussions and demonstrations of stagecraft, costuming and make-up.

A by-product dividend has been a growing awareness of needs in physical plants and the amassing of a body of information in regard to existing plants, their adequacy and shortcomings.

B. Our Circulating Exhibits are accepted and have been accepted from their very inception as being fully curriculum-oriented, and a most desirable resource to be placed in the hands of a knowledgeable teacher. They were designed that way. So much so, in fact, that the demand became so great after one year of experimental use that we had to duplicate some of the exhibits during the second year.

C. The Planetarium has been used just about to capacity. Unfortunately, distance makes it less available for schools further away than 25 or 30 miles. This is due to the fact that the transportation each way takes too much time from a total school day for a single lesson in Space Science. A mitigating factor, however, has been the fact that schools more than 40 miles distant could arrange for a half-day or whole day visit to Roberson Center and take advantage of the docent-guided tours of the Museum of History and Museum of Art included in the Center complex.

The Planetarium lessons have been specifically planned for each age group and each level of background information which a child is likely to have upon his arrival. The result has been wholehearted acceptance by all the schools in nearby areas. One nearby school system, next year, for instance, has taken up a great share of the fall time even though there is not likely to be any subsidy. This particular system recognizes the Planetarium as a necessary unit in its coordinated effort to teach Space Science to children in intermediate and the junior high years.

III Effect on the Legal Applicant and Administering Agency

The Broome County Board of Cooperative Educational Services, as the title implies, has for many years provided special services the costs of which were too great for many districts to bear individually. Included among the shared programs have been such as Remedial Reading, Staff Psychologists, Nurses, Data Processing and Accounting and, on a large scale, the development of a regional vocational high school. The program of the Upper Susquehanna Regional Educational Service Center, funded by the USOE under provisions of Title III, ESEA 1965, opened up new areas of shared programs involving the performing and visual arts, history, natural science and other elements of humanities education. The economies and qualities available through contracting for the operations with a single management unit, the Roberson Center for the Arts and Sciences, professionally and historically involved with those disciplines became apparent.

A new understanding of the educational values that can be made available to schools through the maximum use of appropriate community resources in those fields has been established. The producers of the program, almost without exception, displayed flexibility. They have been sensitive to the requirements and problems facing teachers and administrations in the several schools and cooperated in keeping disarrangements of school routines to a minimum.

The professionals who presented the programs in school settings equally were cooperative and in nearly every instance endeavored to accommodate to the needs and procedures of the professional teachers.

To our knowledge, there were no more than a dozen instances out of the more than 1,700 presentations where understanding, cooperation and/or discipline were less than satisfactory. In the reception of the total program the students reacted positively and enthusiastically to excellence of quality in the offerings as well as to the substance. The greatest change has been the birth of a new and high regard for the cultural agencies and their professionals, embracing educational potentials, lying outside of the school systems and ready, willing and able to cooperate in improving the education for all children. Approvals by the appropriate divisions of the State Education Department confirm the conclusions of our member districts, districts for which we served as agent and ourselves as to the new and effective educational values inherent in the program.

IV Effects of the Project on the Cooperating Agencies

(1) The major contributors to the Project have been:

The Roberson Center for the Arts and Sciences
The Phoenix Theatre
Tri-Cities Opera
Briansky Ballet Group
Community Symphony Society
Young Audiences, Inc.
Broome County Historical Society
Binghamton Museum of Fine Arts
State University of New York at Binghamton
Broome Technical Community College
New York State Council on the Arts
Southern Tier Educational Television Association
WNBF-TV Channel 12
Binghamton City School District
Union-Endicott School District
National Audubon Society
Susquehanna Conservation Council
Broome County Board of Legislators

(2) The cooperating community agencies have found new avenues and methods of collaboration. Especially noteworthy is a new awareness of the ultimate unity in the diversity of their disciplines and specific levels of service. A mutually respectful and rewarding collaboration has been engendered among the institutions of higher learning and the "cultural" institutions in the community. The latter increasingly become the bridge between university and college and the school systems, as well as the public.

Among the performing arts organizations there is a growing sense of worth and reward in their dedication to expression in educational settings. The contact with unsophisticated youth has been an immense stimulus and offers great challenges to produce the best of professional achievement.

The Roberson Center has gained invaluable experience in the coordination of many and varied resources into a single project and has developed logistical and fiscal know-how and practice in the scheduling and delivery of the massive program throughout a region exceeding 6,000 square miles in area. Perhaps of paramount importance has been the creation of open communications and rapport between nearly 100 school districts and Roberson Center and the allied community resources.

(3) The greatest change observed as a result of the project among the schools is the active seeking out of these programs and avid demand for more. In this growing demand, there is apparent an increasing thoughtfulness as to how the programs can be more closely integrated with curriculum. Many such suggestions have been made by teachers. This constitutes a noticeable change from a general attitude toward programs offered from outside the school as unnecessary "frills" or "interruptions." The volunteered comments by teachers, supervisors and principals recorded in the evaluations also reflect positive reactions on the part of the students.

As Professor Duff commented in his evaluation, "..the museum and the school - can enrich each other when they work together. .... A new climate has been created where the cultural resources of the museum have been combined with the unlimited potentials of the schools."

PARTICIPATING SCHOOL DISTRICTS *

BROOME COUNTY - 98 Schools

Binghamton City School District - 18 schools
Broome County Parochial - 20 schools (Catholic)
Broome County Parochial - 1 school (Jewish)
Broome County Parochial - 1 school (Protestant)
Chenango Forks - 3 schools
Chenango Valley - 6 schools
Deposit - 1 school
Harpursville - 3 schools
Johnson City - 6 schools
Maine-Endwell - 7 schools
Susquehanna Valley - 5 schools
Union Endicott - 11 schools
Whitney Point - 3 schools
Windsor - 4 schools
Vestal - 9 schools

CHEMUNG COUNTY - 48 schools

Breesport - 1 school
Elmira City - 18 schools
Elmira Heights - 4 schools
Elmira Parochial - 7 schools
Horseheads - 7 schools
Horseheads Parochial - 1 school
Spencer-Van Etten Central School - 1 school
Waverly - 7 schools
Waverly Parochial - 1 school
Wellsburg - 1 school

CHENANGO COUNTY - 17 schools

Georgetown - 1 school
Afton - 1 school
Bainbridge-Guilford - 2 schools
Greene - 1 school
Mt. Upton - 1 school
New Berlin - 1 school
Norwich - 4 schools
Norwich Parochial -1 school
Oxford - 1 school
Sherburne Earlville - 2 schools
South New Berlin - 1 school
South Otselic - 1 school

* When the application was filed, formal resolutions had been received from 43 Districts representing 116 schools

CORTLAND COUNTY - 11 schools

Cincinnatus - 1 school
Cortland City - 8 schools
Cortland Parochial -- 1 school
Marathon - 1 school

DELAWARE COUNTY - 14 schools

Delhi - 1 school
Fleischmanns - 1 school
Franklin - 1 school
Hancock - 1 school
Roxbury - 1 school
Sidney Central School District - 6 schools
Treadwell - 1 school
Walton - 2 schools

GREENE SUPERVISORY DISTRICT #3 * - 25 schools

Andes Central School - 1 school
Charlotte Valley - 1 school
Cherry Valley - 1 school
Gilboa-Conesville Central School - 1 school
Grand Gorge - 1 school
Hunter Tannersville - 1 school
Jefferson - 1 school
Margaretville - 1 school
Morris - 1 school
Oneonta - (State Univ. College) - 1 school
Oneonta - 7 schools
Schenevus - 1 school
South Kortright - (Boys Training School) - 1 school
South Kortright Central School - 1 school
Springfield Central School - 1 school
Stamford - 1 school
VanHornesville - 1 school
Windham-Ashland-Jewett Central - 1 school
Worcester - 1 school

OTSEGO COUNTY - 8 schools

Cooperstown - 1 school
Edmeston - 1 school
Gilbertsville - 1 school
Hartwick - 1 school
Laurens - 1 school
Milford - 1 school
Richfield Springs - 1 school
Unatego Central School - 1 school

* Expansions of districts and consolidations added schools in parts of several counties not included in the original eight: Broome, Chemung, Chenango, Cortland, Delaware, Otsego, Tioga and Tompkins.

TIOGA COUNTY - 14 schools

Newark Valley Central School - 2 schools
Owego-Apalachin - 7 schools
Tioga Central School District - 4 schools
Tioga Parochial - 1 school

TOMPKINS COUNTY - 30 schools

Candor - 1 school
Dryden - 1 school
Freeville (George Jr. Republic) - 1 school
Groton - 1 school
Ithaca (Cascadilla Day Prep) - 1 school
Ithaca City School District - 16 schools
Lakemont - (Lakemont Academy) - 1 school
Lansing Central School - 1 school
Newfield - 1 school
South Seneca Central School - 3 schools
Romulus - 1 school
Trumansburg - 1 school
Ithaca Parochial - 1 school

PENNSYLVANIA SCHOOLS * - 17 schools

Bradford County - 5 schools
Susquehanna County - 7 schools
Wayne County - 5 schools

Total - 282 schools
96 districts

---

* Schools in Pennsylvania began participation (funding their own) during the last year. An original hope was that project funds derived from allotments to both New York and Pennsylvania could be brought to bear. Although the New York State Commissioner of Education and the Superintendent of Public Instruction, Pennsylvania, both endorsed the proposal, it was discouraged by the U.S. Office of Education.

V Dissemination of information regarding the program and its results has been accomplished by -

(1) unsolicited requests...

293 unsolicited requests by letter, telephone and in person have been filled by providing copies of the Application and as time passed by summaries of the programs delivered with assembled comment by teachers and administrators of the schools concerned and by producers of the program...

Information has been sought by Associated Councils of the Arts, a national organization which in turn has passed on the information, as has the American Association of Museums. Others include the New York State Council on the Arts, Commission on the Arts for the State of Connecticut, Michigan State Council for the Arts, Pennsylvania Arts Commission, Pennsylvania Historical and Museum Commission, State, Regional and community arts councils as well as school districts in the states of Maine, New Hampshire, Massachusetts, Vermont, Connecticut, New York, Pennsylvania, Ohio, Indiana, Illinois, Michigan, Missouri, Tennessee, North Carolina, Florida, Mississippi, Louisiana, Oklahoma, Texas, Colorado, Wyoming, Montana, North Dakota, Arizona and California.

Television - Roberson Center's basic television series carried sixteen half-hour to one hour programs explaining and reporting on the substance and progress of the project... a substantial number of viewers are outside the project area.

Newspapers and Magazines - Materials furnished on request by the New York Times, Christian Science Monitor, and general releases to regional newspapers having distribution outside the project area.

(2) 11 National and Regional Conference Programs - The Project Director has taken part in panel discussions and delivered explanatory talks on the program and its results to National Conference of Arts Councils, New York City; National Association of Ballet Organizations, New York City; Northeast Museums Association annual conferences, Newark, N.J. and Binghamton, N.Y.; New York State Association of Museums, annual conference, Binghamton, N.Y.; First National Conference of State Arts Councils, Chicago, Illinois; New York State Community Theater Association, Albany, N.Y.; Committee on Higher Education, Northern Indiana, and South Bend School Corporation, South Bend; State Conference on the Arts, Lansing, Michigan; Study Conference on Community Arts Councils, sponsored by ACA, Tarrytown, N.Y.; American Association of Museums, annual conference, Toronto, Canada.

(3) 276 + personal visits from outside the Program Area - Approximately 150 members of the New York State Art Teachers Association in annual conference at Roberson Center, headquarters of the Upper Susquehanna Regional Supplementary Educational Service Center. Fifty-two individuals representing a cross section of community responsibilities, educational, social, economic and governmental from adjacent areas, in

an exchange of information Conference. Eighteen members of a Title I social studies Task Force. Fifty-six individuals or delegations including directors of other regional projects, other state education departments, museum projects, New York State Council on the Arts and non-Title III officials, N.Y. State Education Department, N.Y. State Opera Association. Visits by U.S. Office of Education officials, Richard McCann, Dr. William Young, Carol Shimkus and State officials.

(4) Approximately 100 copies each of the Reports covering the findings of the two summer Conference-Workshops which developed new content and presentations in the field of music were circulated to authorities around the country.

(5) A substantial quantity of this Final Report, financed by other than Federal funds will be disseminated widely.

(6) Estimated Cost of Dissemination - The costs of dissemination have been minimum since most of the expenses have been paid for by those seeking the information... organizations in conference, for example. Releases to news media and the copies of application and reports have been a matter of paper, clerical time and postage...all a matter of perhaps $1,000. plus staff (especially the Project Director's) time. The latter is regarded as much a matter of "input" into the program, since questions and comments provide a form of evaluative information, as well as dissemination.

VI Continuation without Federal Funds

This project was planned and funding applied for in accordance with the original Federal guidelines. During the first year of ESEA 1965 the Office of Education fully recognized that some projects would, by their nature, require longer periods than others for introduction and demonstration sufficient for the values to be recognized and a gradual phasing out of Federal funds undertaken over a period of years. The Executive Steering Committee of the project* equally appreciated the difficulties to be met. Five years was agreed upon as the probable minimum period required for school boards, voters and the staffs of a wide variety of districts, to become sufficiently acquainted with, and convinced of, the educational values and cultural benefits inherent in the program. However, subsequent regulations departed from the original implications and constrained all projects to rely on only three years of Federal funding.

Because of the previous decade of experimentation in program and development of relationships with a number of school districts in a wide territory, Roberson Center was able to mount a considerable program during the spring of 1966 without a formal Planning Grant period.

---

* Chief school administrators of the six largest districts in Broome and Tioga Counties and two rural central districts, the president of State University of N.Y. at Binghamton, the president of Broome Technical Community College, the Diocesan superintendent and the president of Broome County Board of Cooperative Educational Services and the director of Roberson Center.

However, the start and stop budget period approvals practically eliminated lead time in arranging contracts and schedules. (The first grant was for six months, the second for three months only, the third for nine months and the final terminal grant was set at fifteen months.) Legal budget period approvals were received only shortly in advance of the beginning date and the final budget period notification arrived ten days after the period had begun. This seriously impaired much of the planned efficiency in scheduling and economies in employment of professional artists.

Despite the uncertainties of funding indicated above, during the spring of 1967, the program reached the peak of mobilization. Based upon demand for the programs, a reasoned budget of $509,430 was submitted for a year of full demonstrations to begin September 1, 1967. Just at that point, the previous funding level of $343,700 during the build-up year was reduced by more than 30% and the termination date set at November 30, 1968 - reducing the total project period to 32 months. At that time, also, a number of school districts took delayed action to participate in the program. Thus, no period of full demonstration was possible before the phasing out of Federal funds was mandated abruptly, not "gradually over a period of years."

From the outset of the project it was made clear to all participating school districts that its long range continuation would require local funding. Beginning early in the first season and periodically through two and a half years, full demonstrations were offered to the adult public, school and college faculties, and public officials for the purpose of acquainting as many of the people as possible with the content and objectives of the project. Various media of public information, including Roberson Center's own weekly television series, were also enlisted in the process.

Twelve months from the inception of the project (embracing not even two consecutive terms of a school year) in April, 1967, chief school administrators were canvassed to record their reactions to the project and the comments of their faculties. In addition, each official was asked to indicate at what point in time it would be feasible to allocate funds in the district budget toward support of the program. The results of the survey are tabulated below.

As of April, 1967--out of 55 districts then participating--

5	Districts indicated the possibility of some local funding in fiscal year	1968-69*
11	"	1969-70
36	"	1970-71
42	"	1971-72
7	Chief school administrators felt that their voters would not accept funds in the local budget for the programs.	
49	Districts responded.	

* Actually 36 of the 93 ultimately participating districts committed approximately $25,000 for the last half of fiscal 1968-69. A number of the 93 districts are small "contract districts", where students attend classes in neighboring districts.

Early in July, 1968, negotiations were opened with the Broome County Board of Supervisors for the purpose of obtaining an appropriation from that agency to meet the costs of "development and administration of extension services (the Title III program) and coordination with the general programs" of Roberson Center in "the maintenance and operation of a public museum" (in accordance with the provisions of New York County Law.) The Board of Supervisors approved an emergency allocation of $52,084 for the calendar year 1969 to meet administration costs. Roberson Center officials plan to solicit additional county governments whose schools participate in the program.

Meanwhile the individual school districts were strongly urged to file applications for funding of the programs through the BOCES* systems within the geographical area. This latter procedure would entail the commitment of local district funds during the current year and automatically generate State Aid mandated by formula during subsequent years. In effect, then, funds committed by each district in the second year could be increased by an average of more than 50%.

For the final six months of the 1968-69 school year, 70% of the total funding for the project has been borne by local funds. The balance of 30% was made up by residual federal funds remaining unexpended from the total three-year grant of $710,962. (A six-month extension was authorized to terminate May 31, 1969.)

While impetus has been considerably impaired, there is a substantial indication that a number of districts will devote funds to the continuation of major elements of the project. They will pay only the specific costs of each unit of program. Despite the drastic and increasing pressures on school budgets in the State of New York, the long range future of the program and its benefits appear to be assured. A firm example has been set for similar regions in the nation.

---

* Boards of Cooperative Educational Services, legal intermediate educational agencies in New York State.

Thus, a broad interdisciplinary program of high professional excellence, richness and relevance has been introduced and substantially exemplified. The central institution, Roberson Center for the Arts and Sciences and the collaborating educational and community cultural agencies will continue to seek private, as well as public, funding in order that the benefits will be available to the succeeding generations of school children.

OE 4382 (11-66)

Upper Susquehanna Regional Supplementary Educational Services

Fiscal Summary and Information
March 21, 1966 - May 31, 1969

TOTAL EXPENDITURES			$ 742,214.09
Source			
Federal Funds Title III,P.L.89-10		$ 710,961.97	
Broome County	Non-Federal support	25,469.00	
School Districts		4,540.62	
Roberson Center		1,242.50	$ 742,214.09

Total Units of Program Delivered	5,100	
Total number of Student-Experiences	760,774	
Net costs, total program*	$ 577,534	
Administrative costs**	$ 164,680	= 28.2% to prog. = 22.18% to total costs
Average cost per unit of program	$ 145.50	
Average cost per student-experience	0.97	
Cost per student enrolled in participating districts	4.60	

* Includes substantial capital costs - i.e. Mobilab (Nature Study) and exhibits.

**Includes substantial costs of preparation of teacher and student guides.

N.B. This experience shows that with the exceptions of the Planetarium and the Nature Study Mobilab, with a 10% increase, the same Administrative operation is capable of designing, managing and causing to be delivered double the program over the Region served. In rough figures:-

	over three years
Total program costs	$ 1,154,000
Administration	180,000
	$ 1,334,000

$$\frac{\$\,1{,}334{,}000}{3} = \$\,444{,}666 \text{ per year}$$

$$\frac{\text{Annual cost}}{\text{Total regional student enrollment}} \quad \frac{\$\,444{,}666}{161{,}107} = \$2.76 \text{ per student per year}$$

$$\text{Average per pupil expenditure per year} \quad \frac{\$\,2.76}{\$900.00} = \text{3/10 of one per cent.}$$

Major Unit-of-Program Costs-Cost of Student-Experience: by Categories

No. of Units		Net Cost*	Includ. Admin. Cost **
296	**PHOENIX THEATRE**		
	Unit Cost	$ 400.00/perf.	$ 512.80
(519)		(144.00/incl. wksps.	184.60)
	Student Experience Cost	0.96	1.23
129	**OPERA**		
	Unit cost	563.00/perform.	721.76
(13)		(512.00/incl. wksps.	656.38)
	Student-experience	1.52	1.93
85	**BINGHAMTON SYMPHONY-SYMPHONETTE**		
	Unit cost (combined)	721.00	924.32
	Student-experience	3.28	4.20
166	**BRIANSKY BALLET**		
	Unit cost	291.00	373.06
	Student-Experience	0.80	1.03
456	**YOUNG AUDIENCES ENSEMBLES**		
	Unit Cost	190.00	243.58
	Student-Experience	0.45	0.57
46	**JOHN COVELLI, Pianist**		
	Unit Cost	243.00	311.53
	Student-Experience	0.79	1.01
31	**ARTHUR SCHRADER, Singing Hist.**		
	Unit Cost	117.00	149.99
	Student Experience	0.48	0.61
2,549	**SCHOOL EXHIBITS**		
	Unit Cost	22.40	28.72
	Student-Experience	0.15	0.19
463	**PLANETARIUM**		
	Unit Cost	37.00	47.43
	Student Experience	0.80	1.01

* If budget available for each year is known in advance, the unit costs can be reduced by virtue of-longer terms of contract for performers-greater numbers of units can be delivered, spreading amortization of pre-production costs over as much as double the number of engagements.

**An increase of approximately 10% in administrative costs could accommodate delivery of double the number of units-of-program. Thus the percentage relationship of administrative to program costs may be reduced from 28.2% to approximately 16.0%. The cost per student enrolled in the region would be approximately 3/10 of 1% of the average per pupil expenditure.

UPPER SUSQUEHANNA REGIONAL SUPPLEMENTARY

EDUCATIONAL SERVICE CENTER

PROJECT NO. 66 - 416

AN EVALUATION

ROBERT E. ARMSTRONG
SPECIAL STUDIES PROJECT
ROCKEFELLER BROTHERS FUND

APRIL, 1967

"In considering the status of the arts today, it is of utmost importance to remember that it is not only in scientific potential or military prowess that the world measures our nation. Relatively young as our country is, our reputation for material success and mechanistic achievement is firmly established. Foreign nations respect our civilization for what we can do. We must take care that they also respect us for what we are. From the vantage point of, and the wisdom created by, ancient and rich cultures other countries can readily assess the degree to which we cherish the values explicit only through the creative spirit which animates our arts. Just as we cannot fail in other aspects of life, we cannot fail here.

"As our leisure increases, we must increasingly attend to the endeavor of using it to bring to our lives the added beauty of cultural enjoyment. We cannot let it be said that people of democratic countries like America know how to work but not how to live."

-- The Honorable Arthur Goldberg

Over the past several months, in connection with my work with the Special Studies Project of the Rockefeller Brothers Fund, I have been engaged in a review of the role of the arts and humanities in a general education. This review has been inspired by the belief that humanistic studies are as important in the development and expansion of the human potential as reading skills, mathematics, and other, more traditional, academic disciplines. The growing acceptance of this belief is perhaps best demonstrated by the active and expanding interest in these areas of the federal government, state governments, corporations, private foundations, and a wide range of other public and private organizations. Ambassador Goldberg's eloquent statement of support for this principle has been echoed countless times and at many levels.

My own review of the field -- in addition to involving a selective survey of the literature on the subject and a series of interviews with experts and theorists in these areas -- has also brought me into contact or acquaintance with a wide range of experimental programs in the arts and humanities across the country.

After an extensive review of programs in the Upper Susquehanna Regional Supplementary Educational Service Center, I can say, without qualification, that this program, funded under Title III of the Elementary and Secondary Education Act, is the most comprehensive, most capably administered, most imaginative, and has the widest implications of any with which I am familiar. Its continuation, in my mind and in the view of others completely uninvolved with the program with whom I have spoken, is vital not only to the region directly served but to those across the country who are looking to this project for inspiration and guidance in an essentially uncharted field.

An in-depth evaluation of the program of this nature is difficult in the extreme. As has been pointed out to me on numerous occasions, tools for evaluation and adequate means of testing have yet to be developed. Tests designed to measure a student's factual knowledge of music or art, for example, do not give an indication of his increased sensitivity to these forms, nor do they reflect the development of his perceptual capacity, which many educational psychologists feel is the principal contribution. The thesis that these disciplines provide an opportunity for expanding creativity and self-expression has wide acceptance, but techniques have yet to be devised for demonstrating its validity in empirical terms.

Considerable mention is now being given to this problem of evaluation -- most notably, perhaps, by Dr. Rudolph Arnheim of Sarah Lawrence College and Dr. Abraham Maslow of Brandeis University. It is also of interest to note that the Educational Policies Commission of the National Education Association is presently engaged in a study designed to demonstrate that the arts and humanities do have a most vital role to play in a general education and must not be considered of value only to the gifted few. At the present moment, however, we do not have the benefit of an effective method of judging the contribution of these subjects to the educative process.

How, then, can one approach an assessment of the success or failure of a program of this nature? Four areas stand out in my mind as providing the most valid guidelines for such a review:

(1) What is the quality of the program and materials presented and the participating schools?

(2) How effective is the administration of the program as a whole?

(3) What has been the response of the students, teachers, and school administrators involved?

(4) What demonstrable results have come from the program?

I. PROGRAM QUALITY

A. Performing Arts

On the performing arts aspects of the program, I am fortunate to be familiar from an artistic standpoint with the majority of the groups involved.

The Young Audiences program, which has provided to date 233 performances by 14 chamber ensembles in 174 schools, is uniformly regarded as the most experienced, most effective, and most professional organization in the field of music for elementary school audiences. The procedures established by the organization for the selection of the touring ensemble guarantees that the professional quality of each group and its ability to communicate to its audience is of the highest order. The success of Young Audiences is best measured perhaps by its growth over the space of fourteen years from a program operating in five schools in one city (Baltimore), to a national organization that now reaches more than 3,000,000 children in 27 states each year.

The Portable Phoenix carries with it the cachet of the APA-Phoenix Repertory Company, which Walter Kerr, drama critic of the New York Times has called "our best repertory theatre." The performance of Vive la Comedie that I audited at the Tioga Central School was of the highest professional quality as was its handsome production. The selection of the material used (Moliere, Rostard, Anouilh, and Ionesco) seemed highly appropriate and well suited to the level (high school) of its audience. Particular mention must be made of the "in-class" services provided by the company. The dramatic readings and workshops conducted for groups of fifty or fewer bring the actors into direct contact with the student and foster a sense of involvement that contributes most effectively to his understanding and appreciation of the dramatic form.

The Tri-Cities Opera production of Giannini's Beauty and the Beast was not viewed by this observer. The company itself, however, has a very sound reputation as a polished and professional regional opera group. Although quality must, of course, be the overriding factor, it seems to me particularly important that local groups of this nature be brought into the program to as great an extent as possible. To rely exclusively on 'imported' talent is to imply to the student that these artistic experiences, however pleasurable or valuable, are essentially foreign to his immediate environment.

Oleg Briansky, producer of the lecture-demonstration and performance of classical ballet, is ranked among the leading teacher-choreographers in the East. As director of the Roberson Memorial Center School of Ballet, Mr. Briansky again represents a "local resource" that has been effectively integrated into the program.

The Community Symphonette and Symphony Society are not known to me, nor was there an opportunity for me to attend a performance.

John Covelli, the pianist-lecturer who presented the topic "So You Want to Be A Musician," had an established reputation at the age of five, a reputation that has not diminished over the ensuing twenty-five years. A student of Friedberg and Rauch, Mr Covelli has concertized extensively both in this country and abroad.

B. Travelling Exhibitions

Of the traveling exhibits organized and circulated under the program, I have reviewed eight that have been in circulation and have also had a chance to see a number of others in the process of assembly. The Shaker exhibit, the colonial tool exhibit, and the Iroquois exhibits stood out as particularly effective. All exhibits were assembled with the taste, good sense of design, and effective use and balance of information and artifacts.

The Curator charged with developing these exhibitions, himself a former teacher, revealed in conversation a remarkable grasp of the needs and interests of the grade levels for which these exhibits are intended. The extent of his research in each of the exhibit topics was similarly impressive.

Of durable construction, these exhibits have the additional advantage of being highly portable and suited for display in a variety of situations, from classrooms, to libraries and laboratories. Many exhibits are designed to permit the artifacts to be handled by the student, an innovation the advantage of which is easily recognizable. In design, construction, and content, these exhibits compare favorably with others I have seen from institutions such as Cooper Union or the American Federation of Art.

(Ironically, the one exhibit that I found less effective than the others -- that on fossils -- was singled out during the course of more than one interview with teachers as being singularly successful with students.)

In sum, the quality of the participating groups and materials made available through the Upper Susquehanna Title III project can, in my view, be considered exemplary. One hopes that the standards of quality established here will serve as a guide to other, similar projects contemplated elsewhere.

II. PROGRAM ADMINISTRATION

As Mr. Ralph Burgard, executive director of the Associated Councils of the Arts, pointed out to me, the Upper Susquehanna Title III program has had a unique advantage from its inception. The Roberson Center for the Arts and Science of Binghamton, the central administrative organization through which this program has operated, has long enjoyed the reputation as one of the most progressive and most capably directed community centers in the country. Its history and the extent of its programs and plans are well described in the project applications and need not be repeated here.

Some mention should be made, however, of the qualifications of the three individuals at the Roberson Center who have carried out the principal burden of planning, coordination, and operation of this Title III program: Mr. Keith Martin, project director and director of the Roberson Center, Mrs. Laura Martin, coordinator of educational services, and Mrs. Oliver Winston, associate for schedules and arrangements.

Mr. Martin, who has headed the Roberson Center for the past thirteen years, is also president of the New York State Association of Museums, a trustee of the Eastern Regional Institute for Education, and a member of the board of directors of the Associated Councils of the Arts. His broad experience and expertise have resulted in his frequent use as a consultant by the New York State Council on the Arts, and by a wide range of other organizations, local, regional, and national, concerned with the arts and humanities.

Mrs. Laura Martin, who has served with her husband as assistant director of the Roberson Center, acts as coordinator of educational services for the Title III program. Formerly administrative assistant to the director of the Association of Protestant Welfare Agencies, Mrs. Martin is a member of the Binghamton Centennial Commission and has also served as a consultant to the New York State Council on the Arts.

Mrs. Winston served for more than seven years as the regional consultant for Young Audiences in upstate New York. Her experience in that job has been immediately and effectively translated into her present position as program associate for schedules and arrangements. Her contribution has been recognized recently by her appointment to the educational advisory committee of the New York State Council on the Arts.

A review of the administrative procedures that have been established impressed upon me the simplicity and efficiency which seem to characterize the operation of this rather complex program.

The booking process, which has been the bugaboo of many other programs of this nature, has been handled with remarkably little evidence of last minute cancellations, postponements, or other dislocation. The arrangements for booking and transporting the exhibits seem to provide maximum benefit for the participating schools with a minimum of inconvenience. While many teachers have expressed a wish to keep an exhibit longer than the one week normally provided, this seems to be a criticism that, given the limited number of exhibits that present funds have allowed, does not reflect on the effectiveness of present procedures.

Ideally, serial booking of both performing groups and exhibits would seem highly desirable (the Uses of Steam exhibit to be followed immediately by the Coming of the Railroad exhibit, for example), as would exhibits relating to presentations in the performing arts. I was pleased to find that work toward these goals is now in process.

Although the evaluation forms completed by the participating schools and teachers did not provide space for comments on the administration of the program, it was of interest to me that a number of teachers, principals, and other school administrators made specific mention to me of the smoothness of the program's operation. As one principal put it to me, "Our hands have been free from the administrative headaches that we had all expected." Another recurring theme of these interviews was the degree of cooperation and flexibility that has been encountered from the staff of the Roberson Center, as well as from the other participating organizaiions.

In sum, it seems quite evident that in administrative terms, extremely efficient use has been made of the funds available for the project. One cannot fail to be impressed by the accomplishments of the program's extremely small administrative staff. Clearly this is one major advantage to be gained from involvement with local community resources of proven quality and experience.

III. STUDENT AND FACULTY REACTION

The views expressed by teachers and school administrators in the evaluation forms supplied by the Center do not come close to giving a complete picture. Too frequently forms of this sort are treated as nothing more than a minor inconvenience and the temptation to give a one-word response ("outstanding," "excellent," "first-rate") seems to be often irresistible.

Fortunately, however, there are those exceptions who do take the time to give a more complete analysis of their own and their students' reactions. One of the most meaningful of these came from a senior high school English teacher who, commenting on the Portable Phoenix presentation, noted that "the program must have been devised by people who knew both good theatre and what is going on in high schools." Other comments in the same vein are to be found at all levels and on every aspect of the program.

For my own purposes, individual conversations with teachers, principals, and students proved rather more revealing of the program's impact. An elementary school principal remarked to me that the program has "opened doors for our students that most of them did not even know existed." He made the further point that the effect the program has had in broadening the interests and enthusiasms of his faculty has been as important a contribution as the effect it has had on his students. "You are giving them a picture of a world they have not known anything about, and you are giving it to them 'right-side-up'."

While simple exposure to excellence in the arts is the first essential step in awakening an interest in these forms, most art educators feel strongly that a greater degree of involvement is necessary if this exposure is to have any lasting effect. To this end, I was most impressed with the "in-class" programs of the Portable Phoenix company that I witnessed, and with the reports that reached my ears of similar direct communication established between other performing groups and their student audiences. At least one teacher commented that these workshop sessions "were certainly as interesting and possibly more effective than the performance itself," a view that I would heartily endorse. I would hope that even greater efforts could be made to increase this form of involvement.

There is no question, unfortunately, that many administrators and teachers still regard the performing arts aspects of the program as high quality assembly fare. One high school principal remarked to me that "we always need good programs for assemblies." He did not mean this as criticism. His comment was intended as praise of the highest order.

However regrettable, this attitude will hardly come as a surprise to anyone familiar with the place to which the arts and humanities have been relegated in American education over the years. Another principal, when asked what he meant by the humanities, defined them as being "everything that is not essential." Again, these comments cannot be construed as criticism of the program. Rather they are indicative of the obstacles that any innovative or experimental program in these areas must face.

Attitudes of this sort are not changed overnight, nor even in a few years. But in my visits to schools in the region, I was struck by a number of hopeful signs. An elementary principal, for example, when asked directly if he felt these programs could be compared to the sort of assemblies that his school had had in years past, made it quite clear to me that he would draw no such analogy. "Assembly packages never provided us with anything more than a break in routine.

They were here today and gone tomorrow. The Title III presentations that we have had here are a whole different animal. They have given us something that lasts and are a part of everything else we do."

My final insight into changing attitudes and reactions was provided me by the stage manager of the Portable Phoenix company. On discovering that he had led a similar tour in the first months of the program's operation, I asked him if there were any differences that he had observed in the reception to the company last year and this. "Yes," he said, "there is one major difference. Last year we were cordially received and had fine cooperation from all the school people we encountered, but somehow we were still outside the stream of things. This year it is as if we were a real part of the community. I do not know why, but it is different."

IV. DEMONSTRABLE RESULTS

Having made the point that techniques have yet to be devised for measuring the impact of the arts and humanities on any group of students, it may seem contradictory to speak now of tangible results of the first year and one half of this project's operation. Certain things have been pointed out to me, however, that seem worthy of mention here.

An elementary school principal in a rural area, for example, described to me how a group of parents, on seeing the exhibit of colonial tools, recognized that they themselves had access to collections of artifacts that could be of interest to the school. These have since been made available and placed on display with considerable effect. In another instance, the fossil exhibit displayed in a school in a fossil-rich area kindled an active interest in paleontology that had not existed previously. Examples of this sort of motivation sparked by aspects of the project are numerous.

Most revealing of all, perhaps, was the comment of another principal in a small community who admitted freely that he was unable to calculate the long-range effect of these curriculum enrichment activities. "All I can tell you is that books are moving out of our library that have never moved before. My students are talking about things they have never been interested in before. We have got a healthier climate for learning. Things that they used to know only from textbooks are coming alive to them."

V. GENERAL

One point alluded to in the project continuation application deserves to be underscored. National interest in this particular project has been keen from its inception and has continued to grow. As in so many areas of education, New York State has proved to be the pace-setter for the country as a whole, and this Title III project in the arts and humanities is indicative of that progressive, innovative spirit.

The figures cited in the application on the numbers of organizations and individuals across the country that have shown interest in the program are most impressive, but once again statistics themselves do not paint a complete picture. One has only to talk with arts educators, humanists, arts administrators, and others in the field to recognize the depth of concern for this project. As several have pointed out to me, the Upper Susquehanna Title III program is far the most comprehensive educational effort yet to be mounted in the arts and humanities. The results of its operation will undoubtedly have wide-ranging and long lasting effect on the progress and planning of similar projects. Having now acquainted myself with all major aspects of the project, I readily understand its value, not only to the students and communities directly served, but also to those whose responsibility it is to provide a total education for the children of this nation.

I have already referred to the difficulties in changing public attitudes toward subject areas that have traditionally been outside the mainstream of American education. Signs of change do exist, but a project of a few months or even a few years duration is not likely to bring about any major alterations in ways of thinking.

Science education in this country benefitted greatly from the impact of the first Soviet Sputnik, but one has difficulty imagining any similarly dramatic event that will materially alter in a short space of time our attitudes toward the humanities or the arts. Certainly this must be one of the principal goals of American education in the next decades.

There is no question in my mind that local support for this program exists and is growing. To translate this support into dollars, however, cannot be accomplished in the short span of time allotted. While this must be the eventual object and should be clearly in the minds of those responsible for the program, to permit the project to wither in its infancy would do the region, the concept, and education a major disservice. In the words of one elementary school principal, "You have opened the door for us part way. You have an obligation now not to slam it in our face."

Robert E. Armstrong

- ROBERT E. ARMSTRONG -

Present

Associate
Special Studies Project
Rockefeller Brothers Fund
New York City, New York

Formerly

Special Program Associate
(Educational Programming)
New York State Council on the Arts
New York City, New York

Foreign Service Officer
(Cultural Affairs)
U.S. Embassy
Moscow, USSR

U.S. Embassy
Kathmandu, Nepal

Executive Office of the President
Bureau of the Budget
(Health and Education)
Washington, D.C.

Education

A.B. (Magna Cum Laude)
University of Illinois
Urbana, Illinois

Graduate Program
Woodrow Wilson School of
Public and International Affairs
Princeton University
Princeton, N.J.

NARRATIVE EVALUATION OF ROBERSON CENTER TITLE III PROJECT

by John Carr Duff

Because it is disagreeable to write in the third person, which is common practice in formal reports, I have chosen to write this report in the first person. Since I have been a one-man team employed to survey and evaluate the Title III project currently being carried on by Roberson Center, I'll write in the first person singular.

Many persons are annoyed by acronyms -- words coined by using the first letter of each word in the formal title of an organization or agency or project. (The best example to give here is PACE, which is the acronym we use for Projects to Advance Creativity in Education, the formal title of Title III, Elementary and Secondary Education Act.) However, there is not much we can do with a title like Upper Susquehanna Regional Supplementary Educational Services. Here an acronym would be a great convenience, but the project does not have a nickname Taking my cue from the persons who answer the telephone if you dial Area Code 607 - 723-7953, I have usually referred to the project as Roberson Center Title III Project.

Although this evaluation is written for the information of the E.S.E.A. Title III Office of the New York State Education Department, I was employed, technically, by the Broome County Board of Cooperative Educational Services (BOCES) and have written the report as though it were for the use of that organization.

Evaluation

Instead of writing a detailed report of my observations followed by a concluding statement and evaluation, I prefer to begin with the evaluation.

This may be more convenient for most readers than the conventional pattern.

The Roberson Center project is probably unique among those operating with Title III funds. It is museum-oriented, and it represents the genius of the director of the Center, the dedication of the staff, and the momentum of the Roberson Center for the Arts and Sciences. It provides for schools supplementary education in the spirit of the PACE program. The components of the program are not innovations, but the total program exemplifies the kind of relationship that should be found more often between museums and schools. The program is not experimental in the sense in which that word is used in the physical sciences, yet it represents an approach that encourages the participants to test new concepts in old settings and familiar ideas in new settings. The element of creativity is exemplified in almost every aspect of the program. The program itself is kept flexible and is altered and improved as often as there is evidence that improvements are possible and desirable. In the short time the program has been in operation there has not been a thorough test of all the basic theories, but the evidence seems to indicate that two institutions with basically the same purposes -- the museum and the school -- can enrich each other when they work together.

The concepts basic to the program are familiar to professional personnel in museums, and such a plan as this program puts into operation probably could not have been conceived nor developed by professional educators representing the traditions of the elementary and secondary schools. However, the project has the limitations of its virtues, for classroom teachers as a group have more knowledge and more experience in the teaching-learning process than have curators and docents. A new climate has been created where the cultural resources of the museum have been combined with the unlimited potentials of the schools.

Compared with the traditional school program, the so-called supplemental program is expensive in dollars. It would have been impossible without the generous federal grants that support it. However, cost is always relative. In terms of values widely accepted, the tax monies invested in such a program are more productive than the enormous cost of the space program.

Bias in this Evaluation

This evaluation should be, ideally, wholly objective. It is largely subjective. Moreover, it is inevitable that my biases and prejudices should have influenced what I looked for and what I observed. There is no way to screen out some of my bias, but it is possible for me to state here the aspects of my bias that I am aware of. It is a fact that I favor the use of some part of the federal funds for projects and programs that encourage and support education in the arts. The earlier use of federal funds only for science and mathematics programs seemed to me unjustified. The ratio is not yet in balance, but I welcome the evidence that programs are now supported which have nothing to do directly with the "new mathematics" or with the use of electronic data processing gadgets. My disposition is to favor programs like the Roberson Title III program, and because I am professionally so deeply committed to programs of this kind, I have examined the evidence with great interest in an effort to discover practices that seem to substantiate my faith in this kind of education.

It is also a matter of faith with me that education is a process that is effective only if it is designed to take into account the whole child. In a community that is the kind now described as "culturally deprived," most of the children come from homes that lack the elements characteristic of cultural enrichment and gracious living. Children from such homes have had little or no experience of "good" music, of live drama, and of the other creative arts. Their need of such experience is so much the greater, yet it can hardly be expected that their lives will be significantly changed by a few exposures. Indeed, it is difficult or impossible to assess what changes, if any, result from attendance at a symphony concert or a performance by professional actors.

In education courses there is a principle that seems to apply, even though it may be oversimplified: There is no impression without expression. I believe that the value of an aesthetic experience is enhanced when the individual is given an opportunity to do something about it. What he does may be no more than talking about it, preferably with others who have shared the experience. However, if a new interest has been established, the educational potentials can be exploited best by encouraging some activities that will give the interest more depth and meaning. If the teachers do not use the new interest as the base for more learning, the student himself on his own initiative and following his own bent may explore the interest so long as it lasts.

I believe that the results of learning are not in every case immediately in evidence. A small boy who listens to the performance of a string quartet may seem to be very little changed by the experience, but five years later he is still hearing inside of him the resonant tones of the cello. He is ready then to take lessons on that instrument, and because such miracles happen now and again, he may become the cellist in the high school orchestra. The long-term learnings are rarely measured by before-and-after tests, for the tests are given too soon after the experience that is to be appraised.

It is impossible for me to state here all of my professional assumptions, even the ones of which I am fully aware, to say nothing of many others. One more I should like to state, however: I believe that teaching is the communication of enthusiasm. The singer, the actor, the dancer, the sculptor -- they communicate to us their enthusiasm for their various media. The pianist does not have to tell us in words that he loves the instrument and delights in bringing out of it galaxies of sound that are pleasing and exciting. His performance at the piano conveys to us his passionate enthusiasm. The classroom teacher gets his results less spectacularly, but the principle is the same: The teacher who is enthusiastic about learning persuades some students to become scholars, and the teacher who is enthusiastic about boys and girls conveys to them his confidence in them and his faith in what they will become.

This evaluation cannot be entirely objective, but it is largely disinterested. I am not a resident of the area served by the program, and I am not a member of the Roberson Center staff nor an official in one of the school districts served by the Title III program. I am free to be as impartial as an umpire, for I have no stake in this program, win, lose, or draw.

Evaluation Procedures

Approximately ten days were spent on this evaluation, eight of them in Binghamton and in school districts in the geographic area served by the Title III program. The initial preparation for the task was to read critically and analytically the original application and the application for an extension of the original grant. Monographs, brochures, and articles about the Roberson Center were read, and at the Center the extensive files of evaluations made by teachers and administrators were read carefully. A special report on the use of the museum exhibits was prepared by a member of the staff. At a meeting of the Broome County School Boards Association I talked with about ten school officials concerning the services provided by the program. In the field I had private interviews with district principals, building principals, supervisors, and teachers. I attended two performances by the Portable Phoenix Players and had an opportunity to talk at some length with the actors and the manager. I attended a performance of the opera currently being given under Title III auspices. I talked with teachers and administrators representing the Catholic schools. I had extensive conversations with members of the Roberson staff. I visited the Rexmere Center at Stamford and had an interview with members of the Rexmere staff. I talked by long-distance telephone with one educator whom I had not been able to see when I was in the field.

It was not possible to talk with students except in one instance. It was not possible in the time I had available to arrange for group conferences with teachers, but in one school district I held a group conference with the district principal, the principal of a large elementary school, the A-V specialist, and three teachers. I wish it had been possible to interview groups of lay citizens, but time did not permit this. I talked at length with one Board member and on another occasion had a long conversation with the President of the BOCES Board for Broome County.

In a few instances I found that the administrator of a school or of a district was not familiar at first hand and could not answer questions on the basis of his own observations. This was the exception, however, for most of the district officers as well as the building principals interviewed were eager to talk about the program and could discuss from their own observations the characteristics of the performances that had been put on in their schools. With only a few exceptions the persons with whom I talked were gracious, courteous, and generous in the amount of time they were willing to give to discuss the Title III program.

No written evaluations were used except those on file at the Title III office at Roberson Center. Allowing for the fact that these were not highly refined research instruments, they were informative. The opinions conveyed represented the viewpoint of the persons who had made out the evaluation forms. It was my impression that the information reported was reliable, for the evaluations contained many minor criticisms and some major ones, as well as commendations and highly complimentary remarks. Reading the written evaluations provided me with many questions to ask in the interviews. Incidentally, the information derived from the interviews was consistent with what had been written in the evaluations, although some negative comments discovered in the written evaluations did not come out in the interviews.

Planning

The plan for planning the Title III program was similar to that used in other instances where an agency sought advice and assistance in developing an application for a federal grant. The essential plan was generated at Roberson Center and was submitted to administrative officials of public and non-public schools. These officials gave their approval to the plan after discussion and questions and answers. However, there is no evidence that the plan became one in which the school districts assumed the kinds of responsibility that would have made them partners in a joint enterprise. Instead, the Roberson Center, with a generous grant of federal funds, was going to do something for the schools. The school districts could accept whatever services they

COMMENT #1

BUDGETING

"would (ultimately) be available to..." see page 8 original Application and page 6 Application for Continuation, last paragraph. "Thus far the emphasis has been almost entirely on organization and delivery of the Program to the schools in a widening coverage of the Region. By the end of the current Grant period, August 31, 1967, progress will be made in developing more reliable, but not definitive, cost figures in relation to the grade levels served. The establishment of unit of service costs will be a primary objective of the longer period of operations."

Budget for the first period was based entirely upon what could be mobilized with no lead time and two-thirds of the school year elapsed. Budget for the second period, Sept. 1, 1966 - August 31, 1967 was based upon continuing mobilization and the solving of logistical problems as they might arise.

A third budget was not included in the initial application because the Executive Steering Committee deemed it illogical to estimate the response that far in advance. The third budget included in the Application for Continuation, it will be noted, was estimated at $509,430. (That Application was assembled and submitted under the heaviest pressure on a few days notice, six months in advance of its normal submission date due to a confusion of directives from the State Title III Office and the U.S. Office of Education). Experience of ten weeks in the previous spring and thirteen weeks in the Fall of 1966 gave evidence that full coverage could be attained at that level of funding. The opportunity to pursue the "feasible maximum of opportunities..." was, however, denied by reduction in funding one-third below the rate of the second budget. The symphony request was $60,000, three times the 66-67 item, for example. An objective of the entire program has been to determine the widest region of service in the light of fiscal economy and maximum educational effectiveness. Neither could be measured without several years of accumulated experience and measurement.

might choose, within the limits, of course, of the schedule to be worked out by administrators of the program and approved by local school officials. Although the application for the grant seems to indicate that all the services would be available to all the schools, it must have been obvious that this would be impossible. The school officials were not promised all the services, and even a casual examination of the proposed budget would have disclosed that funds were not requested which would have made it possible to send the symphony orchestra out to even a fourth of the school districts that were to be participants.

The chief school officers of the public schools and of the Catholic schools were the persons who were invited to review the plans, and in some cases members of the central office staff (curriculum directors, directors of art, of music, etc.) were invited either to backstop the chief school officer or to be his proxy. However, the plan for planning the program made no provision for enlisting individual teachers or elected officers of the professional organizations to which teachers belong -- for example, the local branches of the New York State Teachers Association and associations of teachers of certain levels (elementary, secondary), or teachers of certain subjects (English, music, science, art). The teachers were not consulted in the planning phase, although they would be the ones who must engineer in their classrooms the interests and attitudes that would make the Title III services effective as supplementary education.

With the benefit of hindsight, it seems clear that the teachers should have been involved in the planning and also in establishing the procedures for making in-progress evaluations. It might have been a good idea to include students as well, so that they could have become active partners in the enterprise, participating in examining the purposes of the program as well as the procedures by which these purposes might be realized. The students would have been represented by students elected by their peers. It is unlikely, of course, that the student representatives would have participated as effectively as the representatives of the teachers, but they would have given some clues as to how students would respond to the various services proposed. It might be assumed that the students who sat in on the planning sessions would communicate to other students, either formally or informally, their interest in the plans they had had an opportunity to review. This would have been valuable promotion for the Title III services.

Participation by the teachers is not only sanctioned but encouraged by the guidelines as stated in the PACE manual for 1967. On page 7 it states:

> Since the primary educational resource is the local educational agency, representative teachers and other school personnel whose professional activities would be affected by a particular project should be directly involved in all stages of its development. Because innovation must be accepted from "within," teachers and other school personnel should participate in all stages of the change process.

In another section of the report there is stated some reasons for involving adults in the program as spectators and as participants -- adult citizens of the communities served by the school. In this section on planning it seems relevant to ask whether the Title III program might have been better understood and more fully appreciated by lay citizens -- taxpayers -- if they had been represented in the conferences where the initial plans were submitted for review and discussion. It may have been assumed that the members of the boards of education were the representatives of the civic and cultural groups in the several communities, but this is a detail that must be checked out.

COMMENT #2

TEACHERS

The specific plans for the Title III project, which the chief public school officers and curriculum specialists were invited to review, were based upon a decade of direct involvement of teachers in the development of the concepts and content embraced by the proposed project. The teachers so involved included not only teachers in a number of the schools in the region but also the performing teachers producing the programs. The majority of the musicians in the Young Audiences program, for example, have been, are, and continue to be teachers of music in public and private schools. Of 25 Young Audiences musicians in the recent tour under Title III - 14 have taught in public schools such as Newton, Massachusetts, Ithaca, New York and Hammond, Indiana. All teach privately and 13 teach in private schools, 13 teach and/or have taught, on college faculties. The musicians are selected largely on the basis of the combination of teaching skills (many are certified) and musicianship.

In the field of the visual arts, Roberson Center, from its inception, has utilized certified public school teachers in combination with non-certified teachers of art in its own classes and has worked with the teachers organizations such as the N.Y. State Art Teachers Association and Science instructors, and teachers of history in developing its methods, materials and concepts of utilization of its resources in art and history for educational enrichment in the public schools as well as at the Center. Having had experience, not only involving the teachers but also some 30,000 children of varying grades in its programs over a ten year period prior to ESEA 1965, the Center felt, and apparently the representatives of the LEA's concurred, that the program was soundly conceived with due consideration of the experience of resource experts, public school teachers, administrators and representative laymen. (Board members of the Center's constituents, the Opera, Symphony and others, as well as the Center's Board.) Representatives of industry, business, finance and other elements of the community discussed the program at a meeting with educators on October 15, 1965. Through the progress of the program frequent discussions have been held with lay citizens, many of whom had observed the programs in action.

The rapid expansion of the program could not allow for the prior engagement of all the teachers in all of the districts the program hoped ultimately to include. The peers of both teachers and students had long been involved.

The board members, of course, must be persuaded that the services proposed and, after the grant had become effective, the services available were important supplements to the regular school curriculum, but in many communities there are individuals and groups that can be enlisted to support innovations sanctioned by the board of education that seem to offer cultural advantages not commonly available in the school district.

To sum up, there might have been better "communication" concerning the Title III program if the planning phase had been carried out with a broader base -- if representatives of the teachers, the students, and the lay citizens (parents and other interested adults) had been actively enlisted. This is to assume, of course, that the persons who were involved in the planning would have passed the word to the groups they represented. Greater interest in the program might have been generated. Equally important, there might have been at every age level more insight concerning the purposes the program was to serve.

In conversations with school principals I often heard the Title III performances referred to as "assembly programs." Each school, presumably, must offer an assembly program periodically -- usually once a week. (It is ironical that there is only a vague notion as to why the assembly programs are scheduled, but they are scheduled, and there is a common awareness that the programs should be good. The Title III performers were given ratings that indicate that they had satisfied the rather nebulous criteria set for judging the quality of assembly programs. (Assembly programs are generally regarded as "extra-curricular," and they are not subject to the kind of quality control that applies for the prestige experiences represented by formal subject-matter instruction.) The point is that the school principals were sometimes looking only for some kind of a performance that would be adequate as an assembly program. What is worse, they sometimes failed to perceive that the performance provided by the musicians, or the actors, or the dancers of the Title III program was of a quality far above that set for assembly programs. A Title III performance is in another category entirely, and the failure of the principals to perceive this may have been due to their lack of understanding concerning the purposes of the exemplary program. They could not all be in the planning phase, of course, but some part of the communication process should have given them a clear understanding of the difference between a conventional assembly program and a performance by a group of professional artists.

Outside Experts

Almost all the teachers in the schools represented in the area covered by the program are professionally trained and fully licensed to teach the grade or the subject to which they are assigned. The members of the staff at the Roberson Center represent a different discipline, and the performers scheduled into the schools represent still other disciplines. Therefore, it is possible if not likely that there would be among the teachers and the school administrative and supervisory personnel some jealousy, antagonism, or hostility toward the outside experts. The performers might put the teachers at a disadvantage, for they would capture the spotlight for one day and then move on to another school. The class in English literature might seem pretty dull by comparison after the actors had performed brilliantly in costume and makeup in the school auditorium. In some cases they would have conducted "workshops" in the classroom, discussing the actor's craft or demonstrating the magic of grease paint and the other things in a make-up box. However, there was almost no evidence that the teachers resented the outside experts. On the contrary, they often utilized the interests generated by the performers. In one elementary school the pupils had been impressed by the costumes and the scenery used by the opera company that presented "Beauty and the Beast." The children had put on a production of their own, not a copy of the production they had seen but one that gave them a chance to make scenery and to improvise costumes and to prepare properties that were larger than life. The principal, seeing the evidences that the activity was a follow-up to the performance by the outsiders, had made a record in color slides of the children's performance.

There was no evidence that the teachers had consistently or uniformly employed the program notes and other information sent to the schools by Roberson Center. This matter deserves professional study, for it seems likely that the best use of the scheduled performances would require that the students be properly briefed in advance rather than see the performances cold. Some systematic follow-up would be desirable, and the nature and the extent of this could be determined by the individual teacher. It would probably impair the educational value of the supplementary experiences provided by the Title III program if teachers were put under supervisory pressure to make a big thing of each scheduled performance both before and after. One supervisor said that the performances were good enough to stand by themselves without any classroom briefings or any follow-up.

It is significant in this evaluation that the professional personnel in the schools were friendly and generous in their evaluation of the Title III performances. They watched the performers with interest, but what is more important, their written evaluations and the evaluations made in conversations with me indicated that they had watched the student audience carefully and critically and were pleased to report that in almost all cases the response indicated that the students had had a valuable educational experience.

In the cases where the audience was either unresponsive or responded in some unexpected and undesirable way, the educators said something like this: "You can't win them all. One audience of fourth, fifth and sixth graders loved it, and the other one, made up of pupils from the same grades, seemed bored and apathetic. It is impossible to tell why one group responds and another doesn't." It is possible, of course, that there may have been differences in the character of the performance, but the educators did not mention this possibility and were never in any way disparaging toward the performers. It is true that many of the educators are not technically competent to render a sophisticated judgment concerning the quality of the performance *per se*, but they are the experts in judging how well the student audiences responded.

Professional Performances

The evaluation of the project required that certain judgments be made concerning the professional quality of the performances scheduled under Title III aegis. "The professional performs with conviction." Even persons not competent to appraise subtle details of technical excellence respond to the performance of a professional in a different manner than they would respond to the performance of an amateur.

Of course, there are professionals and professionals. In Great Britain a musician may take an examination and be issued a "license." The kind of a license he holds indicates the degree of his competence as determined by the examination. It would not follow, perhaps, that he always will perform at the level of skill indicated by the highest license he holds. However, in our country there are no licenses for musicians, nor for dancers nor sculptors nor actors. To engage a number of competent, professionally trained artists requires special information and some good fortune.

The director of the Roberson services for Title III has maintained a consistently high standard for the performers engaged. In the many evaluations written and submitted by school principals, teachers, and other members of the school faculties, there was none that referred to the performers as incompetent. There were many that made a point of commending the actors or musicians or dancers for the professional quality of their work.

In another section I have written a more detailed statement about the performances I myself observed. However, I want to state here that the talent engaged for the services representing the performing arts was of a degree of professional competence that deserves praise for the performers and for the persons who engaged them. This appraisal is based on all the evidence adduced in interviews and on the written evaluations rather than on the several performances that I myself observed.

I did not witness a demonstration or performance by the ballet group, but I was impressed by the fact that the persons I interviewed in the schools where the group had been scheduled usually volunteered an appraisal stated somewhat like this: In this community there are few persons who had ever seen a ballet dancer. When we found that the ballet group was scheduled to perform here, we had some reservations. We were pretty sure the older boys would think it was sissy, and we expected a lot of noise and disturbance. But the members of the ballet group were real pros. They made us understand the discipline that is necessary to become a ballet dancer. Even the boys listened attentively and seemed to understand that the young man who danced was not any sissy but a real athlete. It made a big impression, even if it is the only time in their lives that these kids ever see ballet dancers.

COMMENT #3

See Page 27, Application for a Continuation Grant, January 15, 1967.

Under the heading: The Development of non-Federal Sources of Support: Public-Local, Regional and State.

"Teachers and students in their daily interaction, the administrative staffs, the chief school administrators and the bureaus and administration of the State Education Department - the professionals - are not the only groups involved in making decisions regarding changes in, and additions to, the educative resources and the methods of their uses. The understanding and attitudes of the public and their representatives on local and state lay Boards of Education are of paramount importance.

Chief administrators of the systems of education, with the support of those other intimately concerned groups, propose the resources, means and methods, and the budgets necessary to carry out desired educational programs for their districts. However, District Boards of Education and the Board of Regents (both bodies representing the public) must be disposed to accept the program and, with reasonable hope of success, place it and its budget before the people and their legislative representatives in the appeal for funding. Therefore, in the change process, the state of the public's understanding of the educational values and the costs involved is of critical importance."

See Page 28, Application for a Continuation Grant, January 15, 1967

Under the heading: A Parallel Program in the Community to Stimulate an Understanding of the Values Involved

The total project now proposes a sustained program of high quality in the communities utilizing the same institutions offering the visual and performing arts and museum resources. With support from other than Federal Sources fully staged major performances by the APA-Phoenix Theatre, the Opera, Symphony, Ballet and solo artists as well as substantial exhibitions of the visual arts, historical material, natural science and other subjects would be presented in focal communities of the region. These will be located as wide-spread as possible within the present limitations of adequate and secure facilities. An effort will be made in the timing in order that the community programs will be as nearly contemporaneous as possible with the inschool educational programs.

An unprecedented situation may thus be developed in many of the widely diverse communities in the eight counties of New York (and parts of three counties in Pennsylvania). Parent-child communication regarding the central elements of the Program will become possible...and on the basis of a common vocabulary of experiences.

The achievement of that situation is regarded by our chief school administrators as a useful means of improving the public understanding and paving the way for the state-wide and local acceptance of responsibility for support, especially for such supplementary educational services as are being provided by this Program.

Some performances might be scheduled at times when adult citizens of the community could attend. In the opinion of the director of the project, many advantages would accrue from this. It would be easy to substantiate the fact that in some of the school districts served by the Title III program the adults are no more familiar than the children with professional theatre, with live music played by professional musicians, or with the dance as one of the performing arts. If the project makes these art forms familiar to children but not to their parents, the cultural level of the community is not significantly raised. Indeed, the gap between the generations may be widened by the fact that the parents fail to understand the nature of the experience the children have had. However difficult it might be to arrange for performances that children and adults may attend -- as families? -- it is an idea that ought to be tested. The prospects for a successful outcome would be enhanced if representatives of lay organizations in the community were invited to participate in the discussion of the educational objectives involved and in the planning of the tactics by which the interest and active support of adults could be assured.

The Portable Phoenix

The Portable Phoenix company probably had more impact than any other performers representing the Title III program. In interviews it was most frequently mentioned. According to the records at hand, it gave the largest number of performances. In addition to "The American Family Album" (scenes from "Ten Nights in a Barroom," "Seventeen," "The Skin of Our Teeth," and "The Sandbox" complete) the company of four actors is currently playing "Vive La Comedie!", a program of scenes from four French plays. (They are played in the English translations.) In some schools the players are scheduled to conduct "vocational workshops," and workshops that combine "theatre games" and prepared readings. The workshops are offered only to relatively small groups and entail student participation.

From all reports, the workshops have been well received. The Phoenix players work individually in the workshop situations. Although their training has been in acting, not in teaching, they have been quite effective in working with groups of students. They are sensitive to the nature and quality of the response they get from students in the workshop, and in a relatively short time they have learned to adapt their material to the interests of the group. For example, the "vocational workshops" were planned by Theatre Incorporated personnel in New York City, but the Phoenix players found that in up-state New York there are few students who have vocational interest in the theatre. (Many of them had never seen a live play until the Phoenix players came to their school.) The young actors, with much ingenuity, have played down the vocational emphasis and have worked into their presentation some first-hand accounts of the amusing and interesting experiences they have had in connection with their work in the theatre. By trial and error they have discovered what intrigues the students who meet them in face-to-face groups. Their success seems to be in considerable part due to the fact that they enjoy working with groups of children and youths. If they had been stuck-up actors who were mainly concerned with impressing themselves, the results would have been very different.

The one matter that needs further study is the selection of the plays or the scenes to be played in the stage performances. The evaluations written by teachers and supervisors in the schools mentions this detail often enough to warrant further consideration. The plays -- or rather, the scenes that are presented -- are sometimes found to be objectionable; in more instances they

COMMENT #4

1) The Portable Phoenix dramatic program was chosen to be a part of this Title III project because of its notable success in two seasons of performances for schools in Manhattan. The first program (spring '66 tour) was the same one which had been used in the New York City schools - recast, of course, and redesigned for the more demanding needs of continuous touring. It included an exerpt from a medieval "mystery" play, "Noah," two scenes from Bernard Shaw's "Caesar and Cleopatra" and the complete one-act play, "The Boor" by Anton Chekov. The central theme of the "battle of the sexes" was illustrated by examples from three very different and broadly humorous dramatic styles.

The two subsequent programs were designed along similar lines. All three were carefully chosen to show different treatments of a central theme and to be relevant to a particular age level both in content and in manner of direction. In this connection, it might be noted that one member of the first cast, Michael Berkson, in his own evaluation of the tour wrote: "when the performance was given as a matter of information to adults, the adults did not and could not, provide the continuous uninhibited response to all aspects of the program that the students gave."

The variety of material was felt to have broad reference to a variety of school subjects and to appeal to a wide variety of tastes. As an experience in theatre it was not felt to be necessary to choose dramatic material specifically included in curriculum. Classroom readings, on the other hand, were chosen to closely relate to English curriculum.

It is encouraging to find that after four tours of programs of excerpts and one-act plays, the schools are now asking for complete three-act plays. Perhaps it is not fully realized what the production problems would be and how much more school time would be consumed for such full length productions.

2) The Portable Phoenix program was offered only for high school audiences and advanced junior high. Some Central schools included their entire 7th and 8th grades in the audiences. All four companies noticed the very different responses from the junior high members of the audience from the senior high, especially in those few cases where the audiences were separate.

On this fall's tour, The Portable Phoenix appeared at two Catholic High Schools with the production "Vive La Comedie!" - Seton High and Catholic Central High. One performance of the same production was given at St. Stanislaus Parochial School to an audience comprised of 7th and 8th graders only from four schools in addition to the host school - Blessed Sacrament, St. Ann's, St. James and Garvin School for Adolescents of State Hospital. There were two separate check-ups on the parochial schools as to numbers and grade levels because of some past difficulties with Young Audiences concerts and because of the limited capacity of the hall at St. Stanislaus School. There were no children below the 7th grade level in that audience, as far as it is possible to ascertain. Furthermore, we know of no other case where children below the seventh grade level were permitted to attend.

are found to be pointless in the school situation. The scenes to be played were not selected by teachers nor by the Roberson Title III staff; they were selected by theatre-oriented persons in New York City who decided, for example, "The Sandbox" complete and one scene from "The Rhinocerous" were appropriate for performance by the Phoenix players in high schools. One can understand the motives and the objectives that resulted in the selection of these scenes, yet it is difficult to explain them in terms of educational objectives familiar to teachers. If the scenes are to be performed in schools, they should be related to the objectives of the schools. If the relationship is not apparent to the teachers, it is important to explain the relationship or else to offer dramatic materials that do not have to be explained. The teachers as well as the students took "The Sandbox" in their stride, but that is not evidence that it was educationally significant. What other scenes from what other plays would have been more appropriate in schools? If the scene from "The Skin of Our Teeth" drew no criticism, one who makes an educational evaluation of the performance is, nevertheless, obliged to note that if it were not for the comic business invented by the actors who play the parts of the Antrobus children, the scene would have little interest and less meaning for students. Thornton Wilder's satirical play was amusing on Broadway, but it is not likely that the fourth, fifth, and sixth grade pupils of the Sacred Heart Parochial School will be edified or informed or even entertained by it. The selection of the material used by the music groups needs to be reviewed by somewhat the same canons -- what values does it offer to an audience of youngsters in a school situation?

In the written evaluations and in the interviews another question was occasionally raised: Why perform four scenes from four different plays? -- why not one play? (The performance is scheduled for fifty minutes, so the play would have to be one that was tailored to fit that period.) One teacher commented, "For two years we have got the hors d'oeuvres. When do we get the main course? And the Phoenix players -- the transportable ones, with whom I talked when they were being transported back to Binghamton in the station wagon -- were in agreement that it would be desirable and appropriate to present a whole play rather than four scenes from four different plays. At whatever level of omniscience the decision was made to present the four scenes, the players, it seems were not consulted, although their sensitivity to the response of an audience gave them some special insights as to what might work best.

The Ballet

Although there seems to be a ground swell for the ballet, it is reasonable to ask why the Title III program included the ballet instead of some other form of the dance. The interpretive dance? -- the interpretive ballet? The ballet in this country is not big time, and in the evaluation of the total program one must ask why it was chosen as the dance form that would be demonstrated in the schools in the Southern Tier. Not that there were any picket lines or demonstrations where the ballet was scheduled. On the contrary, the ballet group got rather good reviews, though one school principal, in a burst of confidence, said that so far as he personally was concerned the ballet was spinach. The ballet demonstration seems to have been successful because of the odds against its success. That is, those who were at first entirely indifferent were surprised to find that the ballet group had softened their indifference if it had not actually made them converts. The boys who knew enough about ballet to be assured that it was for sissies discovered that the performers had the qualities that the boys looked for in great athletes -- coordination, timing, and physical strength.

Even for children who will grow up and grow old without ever seeing a performance by a professional ballet company, the ballet demonstration, it may be argued, brought into schoolhouses in rural New York State something of beauty, of grace, and of disciplined precision the like of which had never been seen there before. Perhaps it was caviar to the general, but it was caviar. By one set of values it could be justified, and however little one may be committed to the ballet as an art form, it is easy to concede that it is dancing, and the frug and the watusi and the jitterbug and the slop are not dancing.

The evaluations of the ballet demonstration were less reliable than the evaluations of some of the other program items for the reason that few of the persons who were interviewed and few of those who wrote evaluations on file in the Title III office are familiar with the ballet as an art form. The ballet to them is something exotic. They tend to accept it uncritically because it is part of a program sponsored by an institution of culture. The comments were almost all of a positive nature but were lacking in the kind of insight that would be convincing.

Young Audiences

The Young Audiences concerts and workshops are budgeted for the same amount as the ballet group and are, presumably, important among the performing groups scheduled by the Title III program. In my survey they were infrequently mentioned in interviews, and in some cases they were mentioned not as a part of the Title III services but as a group for which the school had paid a fee. The information I have about Young Audiences is insufficient for me to use in making an evaluation concerning the educational significance of their performances in schools. It is my impression that their concerts and workshops are satisfactory, for I have heard nothing disparaging about them.

The Exhibits Loaned to Schools

In February, 1966, the Roberson Center had nine exhibits that were sent on loan to schools participating in the Title III program. During the spring term (1967) five more cases -- referred to as "packages" in some of the discussions -- were assembled and sent to schools on a definite schedule. Twenty-nine schools in fifteen school districts in four counties borrowed exhibits for use in the classrooms during that term. The exhibits represented the following subjects: Prehistoric Indians, Pioneer Home Life, Rocks and Minerals, What is Weather?, The Civil War, Our Native Trees and Their Woods, Fossils of South-Central New York, How Fossils are Formed, The Chenango Canal, The Development of the Steam Engine, The Coming of the Railroads, Prints and Printmaking, Lighting and Lighting Devices, Early Carpenter's Tools. The last five in the list were added after the Title III program began.

Circulation figures for the present term indicate an extension of the program -- more schools have applied for the loan of the exhibits, and more "packages" have been prepared. Currently there are twenty-one exhibits; by the end of the term there will be thirty-two. The applications currently on file come from 120 different schools in an area representing eight counties.

Scheduling and transporting the exhibition cases has required expert administration and special facilities. The school districts in the tri-cities area pick up and transport cases for schools in the area. Schools beyond the Tri-City area are served largely by two vehicles. In some instances the trucks from Roberson take the exhibits to a materials center (such as Rexmere Center at Stamford) and the trucks that work out of the materials center distribute the cases to the schools to which they are destined.

Interviews with elementary school principals indicated that they were almost all enthusiastic about the service and attributed to the exhibits significant educational values. It was pointed out that although the records indicated that one teacher had made application for the use of an exhibit in one grade, it was usually true that almost all the children in the school went to see the exhibit, and sometimes the exhibit case was moved to two or more rooms.

The educational value of the exhibits is adequately realized only when a "package" is in a school long enough to allow the pupils to have not just a passing glance at the contents but long enough to develop a degree of familarity with the items in the case and to learn something of their meaning. At the present time the period for which an exhibit is scheduled seems inadequate, especially in the instances where exhibits are sent to a center and trans-shipped to the schools from there. If a package is scheduled for only one week over-all, transportation may require so much of the week that the teacher and the pupils have the use of the exhibit for only a day and a half or two days. It seems obvious that efficiency and economy require that the schedules be altered so as to assure time for the effective educational use of the materials. There should be more exhibits, for their value is attested by the increase in the number of applications. Until and unless the number of exhibits is increased, there should be strict limits on the number of schools that can be offered this service.

Persons familiar with the practice in elementary schools are aware that teachers generally try to follow the state syllabus in social studies. It is likely that fifty or more schools will have requested an exhibit on the Civil War, and all want it in early April. But there are only two exhibits on the Civil War. The teachers whose requests cannot be honored must be made familiar with the essential problem. It is likely that they would find the

Civil War exhibit useful even if it must be scheduled in November instead of April. By the same token, exhibits on the American Indian will be of interest even if they are scheduled for delivery several months after the Indians have been studied and have been left behind in the march of history across the pages of the state syllabus.

The curator, a certified professional who has had seven years of classroom teaching experience and two years of administrative responsibilities, who plans and prepares the exhibits is quite aware that children learn more from materials that can be touched and felt, held and hefted, than from those which may only be looked at. At present there are nine exhibits that allow manipulation -- Rocks and Minerals, the Steam Engine, Pioneer Home Life, What is Weather (instruments for handling), Shakers of New York, Prehistoric Indians, the Civil War and Fossils. Old manuscripts, photographs, and books are too fragile to handle; and even sturdier articles would come apart quickly if passed around for inspection by curious children. However, the "hands off" rule is frustrating. Adults as well as children have a natural desire to feel the texture of an unfamiliar thing, to touch and to handle it. The exemplary character of the Title III services should indicate to many alert teachers that they need to have in their schools materials that can be touched and handled. To be sure, they will be broken or worn out, but there are many things that are easily replaced. They pay their way if they provide significant learning experiences. Every school should have at hand, or should be able to procure from a materials center, some of the items that are primarily for touching, feeling, bending -- and breaking, if it turns out that way. The curator at Roberson says that the rocks and minerals will stand a lot of handling, and only the raw asbestos comes back to the center with signs of wear - which was expec ted, and replacements are at hand.

It is obvious that the Roberson Center could never provide enough exhibits to serve all the schools in eight counties. It will continue to offer some exhibit services to some schools, even after the Title III grant has run out. However, Roberson and the materials centers might be of assistance to teachers if they offered annotated lists of firms that sell the kinds of materials that might be ordered routinely just as paper and pencils are requisitioned. Where can one buy fossils? arrowheads? minerals? shells? raw latex? swatches of artificial fabrics? Minie balls? medals and buttons? K rations and pemmican? -- and the other materials that are for experiencing at first hand.

Planetarium

At the time the visits were made in connection with the present evaluation the Roberson planetarium had not yet begun its services for school groups. The new curator for the planetarium had completed a teacher's guide for the intermediate grades (4-5-6), a mimeographed booklet of about fourteen pages containing suggestions for class activities before and after the visit to the planetarium.

The scheduled visits to the planetarium were to begin as soon as the installation had been completed in the new facility at the Roberson Center. The long-range plans for the Center include the installation at a later date of a larger planetarium and a more complex projection instrument. The planetarium that will open soon has approximately 80 fixed seats, enough to accommodate two or three class groups at one time.

The special services directed by the planetarium curator will be continued after the present Title III grant has expired. It may be said, therefore, that the continuation of these services will be a part of the "phasing out" which the Roberson Center will contribute.

Materials for Teachers ("Study Guides")

The Roberson Center has made a commendable effort to supply to teachers in advance of scheduled performances mimeographed information that should be of use in briefing students concerning the performance. There is no check concerning how well this material served its purpose. There is no information on how many teachers received it and used it. Since I interviewed principals rather than teachers, I talked with only two teachers about the materials -- not an adequate number to represent a sample. My impression is that the materials on the Phoenix presentations are the best ones. I believe that all the materials might have been improved if they had been drafted by persons familiar with the teaching/learning process. A first draft might have been written by the representatives of the performers, the revision made by persons professionally trained in the teaching arts. The educational objectives should in every instance be clearly stated. A commendable example appears in the first paragraph of the mimeographed page on "general conditions (which could affect the program)" of the symphonette. The paragraph contains the statement: ". . . This is a CONCERT." It offers "a fine opportunity to learn something of concert-going manners. Also, and perhaps even more important, it offers a chance to learn how much an audience must contribute to ensure the total success of a concert."

It is significant that in some of the "study guides" there are lists of books which might be of use to teachers or students in preparing for the experiences offered by the performing groups. The list is valuable only if the books listed are available. In two instances where this detail was checked, the teachers stated that the books were not available in the school library.

Of doubtful value educationally are the conventional "biographies" of the members of a performing group. It may be argued that the information given has value because it makes clear the nature and extent of preparation each member of a group has had. However, it is largely a convention of the performing arts to publish such bibliographies, and they seem more likely to please the persons listed than to provide information of critical importance for the members of the student audience. The students are not much interested in detailed information concerning the preparation and experience of the players. The play's the thing. The students are rarely given detailed information about the preparation and experience of the educational personnel who work with them throughout the school term, although it would be more readily justified.

Elsewhere mention is made of the predisposition of school principals to think of the Title III performances as assembly programs, which is surely an error, for even if the performances are sometimes scheduled during the period blocked out for the weekly assembly program, they are of another category. In the mimeographed material sent out about the symphonette (mentioned above) attention is called to the several ways in which a concert differs from the conventional assembly program. However, in a form mailed to the schools for use in connection with the Phoenix Players, the Title III office uses the term "assembly program" as the equivalent of the special performance the professional players put on. One may assume that the administrators at the Title III office have picked up the term from the principals. In any case, it is not just a trivial error, for the confusion apparent among the principals indicates a failure to understand the educational purposes of an assembly program and the way in which these purposes differ from the educational purposes of the supplemental education offered by the Title III program.

Check Lists

Related to the study guides (because both originate in the Title III office), the check lists are sent to the school administrators to make clear the nature of the facilities which will be required for a Title III performance that is being scheduled. It makes clear some conditions that the school should arrange. For example, it indicates "Parking space for one station wagon and one panel truck will be reserved." The check list is to be filled out and returned to the Title III office as assurance that the prescribed conditions will have been arranged at the school where the performers are scheduled. The list seems to have evolved as the result of some problems experienced by the performing groups during the first tours of the schools. The device represents good administrative practice and is entirely commendable. However, as I had occasion to observe at one of the performances, the school administrators may on occasion be regrettably lax in observing both the letter and the spirit of their commitment as host to the Title III performers. Moreover, it was not surprising to find that in some cases the schools failed to return the form that should have been sent to the Title III office to indicate that the conditions requested for one of the Title III groups would be taken care of in advance by the school. The schools that have on several occasions been scheduled for a group of Title III performers usually conform to the administrative pattern that has been developed; but many of the schools on the list of applicants are schools newly added to the list and not yet routinely familiar with the preparations that must be made. The district principals and the building principals with whom I talked were all satisfied with the administrative process by which the Title III program is carried on. However, one must realize that, even though schools may superficially resemble each other in the way they are operated, they differ one from another in many ways. One school may be operated from the principal's office -- which is altogether deplorable in the case where the principal is slipshod and lax about details. Another school may be highly organized, many of the administrative details delegated to persons the principal has designated, which is a good system if the principal has been astute in choosing the persons to carry on the functions delegated. However the school may be organized, the success of the Title III performances depend in some part on the effective cooperation of the responsible persons. The physical conditions, of course, vary widely: one school has a large stage equipped with stage lighting and other equipment that permits a professional performance; another school has no stage and no equipment, and the best the performers can do is a compromise with the conditions. A scientific evaluation of the performances would take these variables into account. The performers have accommodated to the conditions they find, but it is likely that the best presentations are made where the conditions are optimal or better.

One of the forms the Title III office sends to schools for use in requesting the services of the Portable Phoenix contains a statement that makes explicit the conditions established by the union to which the members of the group belong, The Actors' Equity Association. There is no reference to the amount of their compensation nor to overtime pay, but it is stated that the company may not be scheduled during one day for more than (1) two assembly programs, (2) one assembly program and two workshops, or (3) four workshops, no more than two of which are theatre games. The term "workshop" is further explained. To teachers whose daily schedule is not controlled by union regulations, the conditions established for members of the Actors' Equity Association must be of interest. The actors are professionals, but they work as members of a union. The teachers are professionals, their preparation more extensive and more rigidly prescribed than the preparation of the actors. Yet the teachers are scheduled every day of the week for more services than are the equivalent of the maximum for the actors. The disparity here may raise some questions among the teachers, for they are often enjoined by their supervisors to belong to professional associations, not to unions, and to perform their duties not as persons employed by the hour or the day. The members of the symphonette (and, presumably, of the other instrumental groups) are in most cases members of the musicians' union and work only under conditions prescribed by their union, even though some of them are employed full-time as teachers or professors of music rather than as pit musicians or full-time members of a symphony orchestra. The BOCES program could not contract for the services of professional actors or musicians under the terms that apply for most full-time licensed teachers. It is fair to point out that the teachers, once they attain tenure, work under a contract and have, in some ways, better working conditions than those which hold for either actors or musicians.

In-Service Courses and Workshops

During the fall term (1967) only one course is being offered under the aegis of the Roberson Title III program, the course on guidance (now called personnel services). This is in contrast with the offering last spring. Six courses were given then. The data on page 11 of the Application for Continuation appear to indicate that the teachers who were enrolled in the six courses would prefer credit courses rather than non-credit courses. However, the non-credit courses were, in general, given a satisfactory rating. The principal of the Catholic High School in Binghamton stated in an interview that a number of members of the faculty had taken the courses and had been well pleased by them.

COMMENT #5

In-Service Seminars

It must be pointed out with regard to the In-Service Seminars that the Roberson Center acts not only as a content producer but also as the Managing Agent on behalf of the Broome County BOCES. The selection of courses given was based equally upon what the Faculty of SUNY at Binghamton were prepared to offer and a consensus of teachers' requests. The Center handled only the arrangements. Suggestions from the State Title III Office as well as the mandates of the PACE Guidelines had strongly indicated the educational desirability of bringing the resources of universities to bear on the content knowledge of teachers.

In the Title III office the written evaluations are on file for all persons who were enrolled in the several courses. There are a few disgruntled persons who indicated that the course content, in one instance was too elementary, or that the instructor was patronizing. Another evaluation noted that the instructor was not qualified to teach the subject offered. These evaluations are, of course, subjective ones and must be accepted as such.

The course given last spring on "modern grammatical theory" raises the question of what kinds of courses should logically be the concern of the Roberson Center. By some logic the course on grammar may be related to the special province of the center, and so may the course on guidance. But the in-service training of teachers is not the province of a museum-oriented project except when the courses offered are patently those which have some bearing on the arts or the sciences represented by the museum's collections and services. Many courses that the teachers may need to improve their professional competence might more logically be offered under some other aegis. Moreover, the courses were taught in Binghamton, which limited the enrollment to teachers who work and live within a relatively short distance of that city. My information about the in-service courses is not conclusive, but my impression is that they were not one of the more successful parts of the Title III program.

In two interviews with persons who had attended what was mysteriously titled "Pilot Conference for Research Training," I learned that it was a four-week summer music conference. It was offered as an in-service (non-credit) experience. Persons attending were allowed a stipend of $90 plus a travel allowance. The cost was something over $20,000, a part of this paid out of Title III funds, a part paid out of "local" funds. The information I have about the conference does not warrant my making an evaluation of it. It would seem desirable to have an evaluation made of summer activities by a qualified person who would not only observe the activities but would use evaluative procedures necessary to form a useful judgment concerning the educational significance of each of the summer workshops or institutes. It is my understanding that a report on the Pilot Conference is in process, including observations and evaluations by participants. Among the latter were music and classroom teachers, educational psychologists, musicians, a number of lay observers and several groups of school children.

Schools not Served

In one of the interviews it was represented that the Roberson Title III program had not adequately served the schools that lie near the periphery of the area represented by the eight New York counties included in the Roberson program. This was to be expected, since the Roberson Center is in Binghamton, the schools in and near that city would probably get more of the services than those that are most remote from Binghamton. However, Binghamton schools (with the exception of the Catholic schools) have not used as many of the services as they might have. The schools within a radius of thirty miles of Binghamton have got more services than those on or near the periphery. The three counties in the Commonwealth of Pennsylvania that were included in the area described in the original application for a federal grant have received no services, the Pennsylvania Department of Public Instruction having ruled that schools in Pennsylvania could not receive services from a center based in another state.

It seems on the face of it that the project as planned took in too much territory. This was not due to any intention to misrepresent the number of schools that would be served; it must have been due to faulty arithmetic, for it would have been apparent that the schools in so large an area could not all

COMMENT #6

Geographical Extent of the Project

(From the Minutes, Fourth Exploratory Meeting, Title III ESEA 1965
Roberson Center, July 29, 1965)

The Title III Coordinator, New York State Education Department made the following observations:

" a) funds available at the outset cannot cover every locality in depth; if the localities are associated in an area program, some benefits of the Federal funds can become affective almost everywhere in the nation immediately. It is likely that State Education Department and the Office of Education will look more favorably on proposals that serve wide areas and include a gamut of desirable services -

b) there will be less danger of unnecessary overlappings and duplications of services and facilities in proposals that cover a wide area -

c) the region served by Roberson Center embracing Broome, Delaware, Otsego, Chenango, Cortland, Tioga, Tompkins, and Chemung counties in New York, and Wayne, Susquehanna, and Bradford in Pennsylvania seems logical -

d) administration of the funding of a lesser number of carefully and logically consolidated programs will be more economical and efficient -

e) a "Center", in the terms of Title III ESEA, is essentially a grouping of services in the broadest sense, within a region there may be some services that emanate from one location and serve the entire region while other services may require not only a "headquarters" but also "sub-centers" in order to provide adequate coverage...and some of the facilities and personnel may be mobile - and some may be located in each district or even part of a district - "

The Coordinator also indicated that the five year life of ESEA 1965 should be a guide in determining the life expectancy of a phased program.

be served. For most of the performing groups and for the exhibits, Binghamton is the base of operations. If performers were to travel from Binghamton to a school and put on a performance during the school day, the scope of operations could have been accurately estimated from the start. While figures on costs were available, they were not examined. It is obvious that the cost of one concert by the symphony orchestra (including not only compensation paid the musicians at the union scale, but also transportation, administrative costs, and miscellaneous costs) would drastically limit the number of concerts that could be scheduled.

The project director and the other members of the staff are not culpable if it is true that twelve per cent of the schools got no services. The fault is that the application represented that the project would serve all of the schools in the eight counties in New York. Careful reading of the application, however, makes clear the importance of the qualifing phrase. On page 6 of the application it is stated, ". . . the Program has set out to accomplish, as near as possible, a complete coverage of all elementary and secondary grades of the participating schools of the Region with its offerings in exhibits, performances, workshops and other features." The administrative staff had to decide what was "possible." Moreover, there were some schools that were not "participating schools." The records indicate that even some of the schools that were not "participating schools" were provided certain services.

Other centers have been established to provide school services similar to some of those provided by the Roberson Center Title III project. The schools in the eastern end of the area served by Roberson are closer to Albany than to Binghamton and may, presumably, get services from whatever projects are operating from Albany. The State Education Department has given its endorsement to the services offered by Lincoln Center in New York City. It would be interesting to have up-to-date information on the kinds of services now available to schools in the Southern Tier by all institutions, organizations, and agencies that now offer services.

Communications and Dissemination

The approved budget for the Title III project lists as one member of the administrative staff "Associate for Communication and Dissemination, one-half time, $8,250 for fifteen months. This position had not been filled when the visits to the Roberson Center were made in October, 1967. The project director stated that it is his wish to employ for this position a man who had had extensive experience in public school administration and who will be able to talk the language of the professional educators. There is a need for a person qualified to serve in this way, for the staff at Roberson does not include at present any person whose preparation and experience are similar to that of the school officials with whom the staff must constantly deal. It would be an advantage to the project to have the services of a person thoroughly familiar with school law and regulations, policies and procedures, and curriculum objectives and practices. Since the budget provides for the employment of another part-time administrator, it seems desirable that the position be filled as soon as possible by the appointment of a person with the preparation and experience and the energy and temperament essential to carry on in this slot. It is difficult to see how the center has, up to now, managed without the services of such a person.

Cost Accounting

On page 28 of the Application for a Continuation Grant it is stated that the state of the public's understanding of the educational values and the costs involved is of critical importance. The reference, of course, is to the values of and costs of the elements of this Title III project.

This evaluation report does not include a financial audit, and no effort has been made to determine whether or not the funds committed by the grants have been and are being spent in such a manner as to assure their economical use. There is, of course, a wide margin in the amount that may be paid to employ persons who are to perform as professionals in music, the dance, acting, lecturing, and the other services represented in the program. For the most part, it is a seller's market; and there is no accepted way to put a price tag on services of this kind. However, a cost accountant could determine cost figures on each of the several kinds of services rendered. Some of the data for an estimate are presented in the Application for a Continuation Grant, though these figures are budget estimates, not records of amounts paid. Moreover, they do not include the charge that a cost accountant would include for administration and incidental expenses.

On page 2 of the estimated budget, revision of March 4, 1966, there are figures which indicate that the cost of each performance of the Portable Phoenix would be $400. Each symphony concert would cost $2,000. Each performance by the opera group would cost $500. Each in-service seminar was to consist of twelve two-hour sessions, which would cost $1,600 for each seminar, or about $67. an hour.

It would be desirable to have the actual cost data for these and other program items, even though the cost in dollars would give no clue as to the educational value. There is no accepted way of auditing educational value. Certainly the educational values could not be determined during or immediately after the conclusion of the project, for in some instances the values would become apparent only after months or years. Nevertheless, the state and federal agencies that administer funds under the ESEA are accountable and must have whatever evidence can be adduced that the tax monies appropriated for educational projects have bought educational advantages. The persons who make the educational evaluation have the burden of the proof, but the procedures for cost accounting are so well known and so widely used that the cost information should be made available at the termination of every grant. If the figures reveal apparent disparities they may be evidence of poor administration or of value systems that should be examined.

Phasing Out Federal Support

On page nine of the 1967 PACE manual there is the statement, "Since the intent of PACE is to stimulate and assist in support of innovative and exemplary programs, the phasing out process is essential in order to conserve Federal resources for other promising PACE programs."

This may be interpreted to mean that when a federally supported program has demonstrated the desirability of some relatively new way of enriching the educational process, the federal support will be withdrawn and the local districts, with whatever support can be got from the state, will be left to pay the costs of continuing the "exemplary" program. The authors of the legislation based on such an assumption surely had not consulted with local boards of education or with local taxpayers. Moreover, the agency that makes application for a federal grant under ESEA Title III does not enter into a contractural relationship which puts it under legal or even moral obligation to continue the provision of the services offered during the period of the grant.

It is unrealistic to expect to find any district able and willing to increase the school budget total by the amount that would be necessary to pay the costs of continuing the services, no matter how well they have been received nor how "exemplary" they may have been.

The project director had conducted a questionnaire study that was intended to secure the opinions of school board members concerning the extent to which the several boards would support by budget appropriations the kinds of services now provided by the Title III program. As might have been expected, the responses indicated that the board members usually rated the services as very satisfactory, but only a small proportion of the respondents believed that a budget line would be written in to cover the cost of continuing the services when the Title III grant expires. The questionnaire, in any case, calls only for a subjective opinion and is in no way a commitment on the part of those who said that they thought the school board would raise through local taxes funds necessary to continue some or all of the services. The record shows that several boards have given token support to supplement the Title III grant, but there is no reason to believe that the taxpayers in the local school districts are now ready to go deep into their own pockets for money to pay for the continuation of the exemplary services. This, however, is not to say that nothing has been gained by the money and effort and talent already invested. Moreover, the willingness of the local districts to underwrite the continuation of the program services would not per se be conclusive proof of the educational value of the Title III program. There are instances of local support for innovations that were subsequently deemed educationally unsound and unworthy of support.

If the local taxpayers are not willing to go for broke to pay for the kind of enrichment offered during the life of the federal grant, it is possible that some modest gains may have been made in the way of enlightening the lay citizens concerning the purposes and values represented by the exemplary services. As stated in another part of this report, the community will have more awareness of the potentials of the supplemental services if community leaders (in addition to members of the board of education) are involved in the planning phase of the exemplary program. The possibilities for local financial support may be further improved if local citizens (adults) are in attendance at the presentation of many of the program events scheduled while the federal grant is operative. Short of taking over the whole program, there are many kinds of support that the local school district might provide over a period of years as a result of interest generated by the exemplary program.

December 1, 1967

Quoted (confidentially) from the as yet unpublished Office of Regional Resources and Development Position Paper by a study team of members of the Faculty, Department of Education, Cornell University. Drs. J.R. Egner, W.T. Lowe and Frederick H. Stutz.

I. "Performing and Visual Arts

"The Roberson Center for the Arts and Sciences is unique in this region (and in the country as a whole) in that it couples the resources and responsibilities of a Title III Center with the consuming passion of its director and staff to expose children and young people to artists and to 'doing' the arts. The work of the Center will be treated in the section on Title III programs. There are a number of publications describing this remarkable institution and its programs and services. Testimony on the effectiveness of Roberson is abundant.

"There is much work to be done in this region to educate in the performing and visual arts. Both schools and communities have needs and certain resources to meet these needs. One thinks of the resources of Cornell University, the Arnot Art Gallery (Elmira), the Corning Museum of Glass, Seward House (Auburn), and numerous historical societies, theatre groups, and musical organizations. While all of these make contributions to education in the visual and performing arts, a coordinated effort on the model of Roberson would help the region immensely.

Perhaps Director Martin and his associates at Roberson could assume leadership of the effort."

****

III. "Title III Centers, Roberson

"The Upper Susquehanna Regional Supplementary Educational Center is one part of the Roberson Center for the Arts and Sciences. Roberson is an art museum; a school offering formal classes in many visual art forms, music, ballet, science and nature study, and drama; a civic theatre; a local history museum; a film library; a collection of studios in which art is created; an informal educational institution offering short term lectures and demonstrations in art, science, drama, music, local history, natural history and other subjects; a craft shop; a planetarium; a children's museum; and the Title III Center.

"Table IV gives some idea of the scope of the program.

Roberson Title III Program
(Two School Years)

	UNITS OF SERVICE				
County	Performing Arts	Package Exhibits	Plane-tarium	Seminars Wksp.	Teacher Att.
Broome	435 (168)	540	194	15	405
Chemung	71 (42)	103	14	0	0
Chenango	121 (66)	141	17	4	17
Cortland	59 (37)	39	0	1	4
Delaware	164 (80)	202	4	5	13
Otsego	111 (48)	126	2	5	3
Tioga	48 (24)	98	23	7	20
Tompkins	91 (36)	106	1	1	2
TOTALS Related activities	1,100 (501)	1,355	265	36	466
	1,601	1,355	265	36	
Est. Audience	348,678	169,375	12,137		466

"In addition some 30 non-school educative agencies have availed themselves of these services. The performing arts presentations included Portable Phoenix productions, concerts by the Binghamton Symphony and Symphonette, the Briansky Ballet, the Hibbitt-Savoca Opera, Young Audiences programs and individual artists.

"The circulating packaged exhibits deal with prehistoric Indians, pioneer home life, rocks and minerals, the components of weather, the civil war, native dress, fossils of Southern Central New York, the Chenango Canal, the coming of the steam engine, lighting and lighting devices, early carpenter's tools, the Shakers of New York, the Iroquois, insects, animal kingdom survey, the blacksmith, and the cooper. "Study Guides" are prepared for the advance use of classes which are to make use of the performing arts series, visits to the museum or the circulating exhibits. They are quite detailed, perhaps a bit too detailed in some instances.

"Thirty-six in-service seminars for teachers and other school personnel have been held to date. In addition to topics dealing with the fine arts, sessions have been devoted to guidance services in the schools and to "modern grammatical theory", tenth grade geometry and other subjects. The comments of the participants in these seminars are, by and large, highly favorable.

"A newsletter describing these activities is regularly distributed.

"Plans for the future include continuation of all of the programs mentioned above. A sharp increase in the amount of attention devoted to opera and ballet is anticipated. A new focus on conservation education would be forthcoming if necessary funds are obtained. The National Audubon Society is cooperating with this effort. A full-time naturalist would be added to the staff.

"The Center also hopes to become involved in providing vocational information to the schools. They would like to provide some special educational TV programming.

"The Title III operation uses the Broome County BOCES as its fiscal agent. It is housed in a complex of buildings on the river's edge in downtown Binghamton. A striking new museum building is involved plus the Roberson mansion. Other nearby buildings are also used.

"Just as it is difficult to separate out the program, it is difficult to identify the staff of the Title III Center, because they are involved in other operations in the museum complex.

"The official statement of accounting lists the time equivalent of five and three-quarters people. The Director is listed as half-time with the Title III operation. He is also manager of the entire Roberson operation. While this report has avoided statements concerning personalities, it should be noted in this case, that the Director is a remarkably articulate, energetic, and effective spokesman for aesthetic education.

"The Roberson Center would like to have closer ties with Cornell. It has used at least six faculty members as consultants. It would particularly like help from the University on the evaluation of its programs. (The relations with closer institutions of higher education, i.e., the State University of New York at Binghamton and Broome Tech, seem to be developed.)

"Whether entirely through, or partially through, Title III support, or by some other means, the aesthetic opportunities provided by Roberson should be continued and expanded. More of these experiences are urgently needed by the people in this part of the state."

****

Comments by Michael Berkson
Actor-Member of the "Portable Phoenix"

(program material directed to senior high school and advanced junior high school students)

"First, I would like to say that in general terms the program was extremely successful. The performances and seminars were met with enthusiasm in all the schools, and all the students and faculty in the schools we visited seemed anxious for us to return soon and often.

I felt that we received fine cooperation from the students and personnel in the schools in putting on the show. It appeared to me that almost all the schools offered to do as much as they could to provide what we needed for putting on the show.

The production was geared to advanced junior high and senior high school audiences. Uninhibited student response occurred without exception in the schools, and was an essential part of the program's success. No matter how sympathetic the audience may have been because of their nature as educators, when the performance was given as a matter of information to adults, the adults did not and could not, provide the continuous uninhibited response to all aspects of the program that the students gave.

The seminars, or discussion sessions, or reading sessions were, as I was told, that part of the total program which sets the Portable Phoenix apart from other tours and which gives the Portable Phoenix the greatest part of its individuality in the eyes of the local schools and communities. The seminars met with a great many instances of success. However, many of these sessions could have been improved, some slightly, others vastly. It is my feeling that it is this part of the program where improvement is most needed.

It was my understanding that the intended purpose of this year's seminars was to interest students in the theatre arts and literature beyond that interest created by the performance, by bringing the students into closer and more personal contact with the actors. If it is to be done in an informal manner, then the number of participants must strictly be limited so that the size of the group does not make it unwieldy for discussion, or inhibiting for those students who wish to participate.

In conclusion, I would like to say I was proud to be a part of the 1966 spring season of the Portable Phoenix in Binghamton. I think the objectives of the program admirable and the results satisfying."

Reaction of Oleg Briansky
Director of Ballet

Mr. Briansky in his lecture-demonstration program on the classical ballet has stated that this experience has proved to him the value of reaching the younger children in their own milieu with a live and vivid introduction to the art of ballet. The special in-school conditions, while extremely difficult technically, offer the possibility of getting back an immediate and uninhibited response. He felt that he was communicating, very directly to the very ones who will be our dancers of tomorrow and our future audiences for the dance.

One of his dancers spoke especially of how her own performance was affected by the close rapport with the children in the small school audiences. In developing her own role in "Peter and the Wolf," she felt directly guided by their spontaneity and in a much more personal way than when she performs before an audience in a large and completely darkened hall.

All of the dancers felt the thrill of the excitement and wonder of the children, so many of whom were seeing ballet and hearing about it for the first time in their lives. (A)

There was, inevitably, a period of adjustment for them to the rigors of the early school hours and the limitations and variety of facilities in the schools. These facts of life were not easy but they were more than offset by the realization of what it all meant to the children.

(A) In many schools they were told that they must not expect the boys to enjoy this kind of thing as much as the girls so it was a real delight to find very little evidence that this was true. One delightful memory was of two sixth grade boys in their basketball sneakers trying to stand "on point" after the program was over.

Statement by Members of the Opera Company

The members of the Tri-Cities Opera production of Giannini's "Beauty and the Beast" expressed great personal satisfaction in these performances for the schools.

They pointed out certain advantages of this kind of presentation over their regular full-length student matinees. Primarily, they noted that the listening capacities of the younger audiences are not over-taxed by a one-act opera lasting less than an hour. In contrast to programs which introduce opera through excerpts, this total opera experience, which includes costumes, scenery, lighting, stage effects and a complete story-line evoked an immediate response and high degree of enthusiasm from the younger children. This was very rewarding to the performers.

The response of the few senior high audiences was somewhat different. They appeared at first to be prepared not to enjoy opera - "live or otherwise." The informal question and answer period in which the musical directors and the whole company participated following the performances gave the company an opportunity to get to know the audience even better. It was gratifying to learn from the older students how much they had enjoyed the opera in spite of early doubts. The excitement of the younger children carried over not only to the question and answer period but also to an exploration of the staging, costuming and a chance to visit with members of the cast.

Opera - Continued

There were also some opportunities, while in the schools, for the opera director to demonstrate some vocal and choral coaching techniques to the music teachers and chorus directors which they felt were rewarding and stimulating to those instructors.

The company also expressed its appreciation of the cooperation school administrators and personnel gave them in the difficult task of adapting their production to the limited facilities in most school buildings.

The younger girls in many cases displayed an "identification" with "Beauty" in this renaissance fairy tale, often by asking her age, while many boys expressed admiration for the singer who had to spend a long period "frozen" as a statue. All in all, the form of expression, new to the students, was taken to heart.

Community Symphony Society Evaluation

"There is absolutely no doubt that the Title III program has proven to be of great benefit not only to the children who are listeners, but to all the performers as well. Music teachers, who make up a large percentage of our orchestra, highly welcome the increased chances to perform with their instruments. Children are critical listeners and the players know they must do their best, on a professional level. For the conductor as well as the orchestra members, the contact with unsophisticated youth has been an immense stimulus and incentive to 'spread the gospel' of live music and to maintain and improve their own skills. The warm enthusiasm of these young audiences as well as the financial additions Title III has provided for the performers have done much to reaffirm their faith in live music and that there is a place in this world for each one of them."

Fritz Wallenberg, Conductor

Mrs. Helen Forsgard, President of the Symphony Board and acting manager on the school tours, attended every performance and had the opportunity to see and hear audience reactions as they occurred. She observed that the children react naturally, spontaneously and sincerely and that the conductor and orchestra quickly established a good rapport with them. The orchestra was rewarded with flattering comments in the workshop periods that followed, as well as by the applause and apparent delight as the children were caught up by the program. Unexpected reward came in the form of letters to the conductor. Some comments from one of the rural schools were: "I play two instruments myself, the piano, baritone and will someday play the sousafone. The few people who don't play an instrument in our room will most likely regret it.", I enjoyed your concert. You were right; I could really hear the cat 'meow' in that one song"; "I wish I could be in your orchestra someday;"

The most oft-repeated phrase was "Please come again" and we knew they meant it, Mrs. Forsgard said. An older student at one of the schools volunteered "I didn't realize this kind of good music could sound so good when you listen." At another school, a high school class stood at the back of the gym for the whole program. Someone sympathized with them and the response was "for this good program I'd gladly stand." A school administrator in one town expressed appreciation that his "band oriented" school musicians had a chance to see and hear the stringed instruments. For these and many other reasons, Mrs. Forsgard, feels that the school tours have been a very worthwhile venture for the Community Symphony and Symphonette.

Appendix II

The PILOT CONFERENCE FOR RESEARCH TRAINING, Summer 1967, brought together

Performing artists (7 ensembles)	30	
Arts Educators	11	
Research and Evaluation Personnel	15	56
Conference Staff		4
A wide variety of childrens' audiences		850
Participants		910 Total

for a series of interaction sessions at which new approaches to the performing arts experience in the school-situation were conceived, tried out and evaluated. The Conference produced new ideas about what makes an "effective" performance, what "involves" an audience and what is the purpose and relevance of the arts to the educational process.

Each group of participants derived unique benefits from the Conference.

A. The PERFORMERS developed new methods of "communicating" with audiences under a variety of conditions. A single 4-step process evolved which may serve as the guide for good program construction and accurate program evaluation. In construction, the steps are

1. Musical context...what are the factors which define each piece and how are the factors in one piece juxtaposed to those in the pieces which precede and follow it?
2. Musical profile...what is heard at a first listening? At a second, a third...etc., assuming that any audience would keep its ears open for repeated hearings. The profile, not the "musical-theoretical analysis" determines what and how the performers will present the piece to their audiences.
3. Profile Projection...what TECHNIQUE or means can the

performers create to project the profile of the piece performed more clearly so that a new audience hears, with one hearing, what might ordinarily take five or more?

4. Execution of Technique...what must the performers do to express their chosen technique most clearly and effectively?

In evaluation, the steps are reversed, and the performers ask

1. If response was not predicted or realized, was there a failure in execution? Example...did performer mumble and destroy the point he tried to make?
2. If there was no failure in execution, was the technique chosen the best to accomplish the profile projection?
3. If the technique chosen cannot be faulted, did the performers actually succeed in predicting the order in which the piece's profile would be heard?
4. If they did, then what is the nature of the factors which define the piece's character, and how are they juxtaposed to the pieces preceding and following.

PERFORMERS also gained invaluable experience examining their attitudes about children's behavior and responses, as well as their feelings about what constitutes the proper purpose and scope of performance series in the schools. It was concluded that the performers' job is to

1) MAKE THE CHILDREN WANT TO HEAR, then 2) TO MAKE THEM ACTUALLY HEAR!

B. ARTS EDUCATORS who attended the Conference found that they were unclear as to their role, not only under laboratory conditions but in their own school rooms. The PILOT CONFERENCE faced the problem of the school-educators' role head on: the educators' views of their own role became broader, less constricted by traditional views of music education. Educators saw themselves as guides to students already motivated by relevant artistic experiences. A new pattern of cooperation between performer and educator became apparent in which the educator could pursue the motivations created by performance, and help the child find cognitive bases for his perceptual knowledge.

C. RESEARCH AND EVALUATION PERSONNEL met at the Conference to share their knowledge of existing measurement techniques with other participants. As a result of their interaction with other groups, they saw new areas for measurement. Once having understood the true goals and aims of a given performance, the research/evaluation people became aware of new possibilities for meaningful measurement not limited to the observed or otherwise induced attitudinal changes of the audiences. At the instant the performers could pinpoint what they were attempting to achieve, it began to be possible to examine the extent to which they were actually successful. New theories of the learning process arose out of these intensive sessions.

D. On the other hand, CONFERENCE STAFF developed a working knowledge of musical, artistic, philosophical, research/evaluation and other factors necessarily a part of any future studies or continuation of the PILOT CONFERENCE. It has become possible to design a working model for an effective and meaningful exemplary program in a new area of the arts and the learning process, which would not have been possible to construct a year ago.

E. Finally, CHILDREN who attended the Conference went away with a fresh, or at least altered concept of what the arts are all about. Children, by being invited to attend all working sessions and rehearsals, were intimately involved in all phases of the Conference's work and were enthusiastic, creative and enormously helpful to their older counterparts in finding untrammeled, logical solutions to problems considered knotty by adults whose attitudes are more fixed and less subject to the clarity of the child's vision.

In short, the PILOT CONFERENCE provided an artistic and intellectual awakening for its various participants who have now seen the changes in themselves reflected in changed responses to their art during the past school year.

Richard P. Kapp
Conference Director

NEW YORK STATE COLLEGE OF AGRICULTURE
A STATUTORY COLLEGE OF THE STATE UNIVERSITY
CORNELL UNIVERSITY
ITHACA, N. Y. 14850

DEPARTMENT OF EDUCATION
STONE HALL

August 30, 1967

Mrs. Oliver Winston
Roberson Center
30 Front Street
Binghamton, New York 13905

Dear Mrs. Winston:

In response to your invitation I spent the days of August 2, 3, 9, 10, and 22 as an observer - consultant at the Roberson Center Pilot Conference. Initially I had planned to be a silent observer for these five dates, to make some notes, and then to sum up my observations in a final report. As you know, it turned out that this plan was not appropriate. Rather, such contribution as I was able to make was done "in process" - that is, during the course of the five days that I attended the Pilot Conference. Nevertheless, I thought it in order to write this letter to sum up some general reactions I had during this experience.

My first reaction was to note the high quality of administrative-intellectual leadership and the excellence of the performing groups. You were indeed fortunate in obtaining the services of Dick Kapp for the Pilot Conference. My observation was that his directive leadership attempts "took" for performers, music educators, observers, and consultants alike. With so many diverse personalities and talents to orchestrate, his task was near impossible. Yet, his aggressiveness, enthusiasm, and conceptual leadership had a contagious effect on the Conference participants and proceedings. In addition, the performing groups that I observed (Hope Woodwind Quintet, the Opera Group, Vadas String Quartet, Buffalo Woodwind Quintet, Goldman String Quartet, Cambridge Consort, and the Percussion Quartet,) did much, both in performance and in post - performance analysis and evaluation, to contribute to a successful conference.

The first two purposes of the Conference:

1. Develop means of increasing the effectiveness of artistic programs for audiences of different degrees of sophistication.

2. Train artists and educators in the methodologies of new and improved techniques in order to insure high standards.

were I think, well met during the four weeks. Responses to the Questionnaire for Performers and Music Educators should give adequate testimony to this. My own observations of rehearsals, audience response to the performances, post - performance analysis, seminars, and conversations with individual participants also confirm the successful attainment of these two goals.

Regarding the second two conference purposes:

3. Prepare those methods for application in ongoing programs and inaugurate a continuing measurement of their interdisciplinary effects.

4. Establish bases for research to ascertain the capacity of the processes of concept communication through perceptions in the Arts to be used as personal processes for learning in non-artistic disciplines.

the evidence, I think, is not all in. In connection with number three, I can only assume that some kind of compendium of the many good ideas and techniques that were apparent in abundance during the course of the conference will be completed. Number four, of course, is the most difficult of the objectives to attain and evaluate. In this connection, two documents emerging from the conference are promising -- the Structural Outline and the memo regarding Teaching of Music through Performance. The former is a schematic statement of philosophy and assumptions; the latter is a taxonomy of the relevant variables to be considered in making inquiry into purpose number four. I can give testimony to the validity of these two documents from a logical point of view. From the viewpoint of music, the validity of the documents will have to be affirmed by others with more specialized training.

Throughout the conference, the processes of self-discovery and problem solving (as opposed to rote memorization or didactic telling) were practiced and emphasized. This is consistent with current thinking in educational psychology regarding effectiveness in teaching and learning. These procedures, indeed the entire spirit of the conference, are also consistent with the underlying ideas of our creativity project being supported by U.S.O.E. and the Finger Lakes Supplementary Services Title III organization. It would seem that some communication between these two efforts in the future might be mutually beneficial.

Thank you for the invitation to a most worthwhile conference. I truly enjoyed and learned from my attendance.

Sincerely,

Richard E. Ripple
Associate Professor
Educational Psychology

RR/sal

MANCHESTER INSTITUTE OF ARTS AND SCIENCES

November 2, 1967

EXECUTIVE OFFICERS
Honorary President
Mrs. Carl S. Fuller
President
Richard Koehler
Vice President
Miss Mary S. Fuller
Vice President
Howard Keegan
Treasurer
Ralph A. McIninch
Clerk
Atty. James Yakovakis
Executive Director
A. James Bravar

STAFF
Assistant Director
Mrs. Jinx E. Harris
Secretary
Mrs. Harry H. Hughes

COUNCILLORS
Carl A. Anderson
Mrs. Robert P. Booth
Mrs. Zvi R. Cohen
Walter N. DeWitt
Miss Adelaide Dodge
Miss Elinor Dodge
Mrs. Carl R. Friborg
Atty. John A. Graf
Miss Sarah C. Holton
Mrs. William Hutton
Mrs. Faustyn K. Jaskiel
Dr. John H. Kennard
Miss Vasilike Kounas
Atty. Jean LaFlamme
Mrs. C. C. McWhinney
Rev. Edward G. Nelson
Chris Pappas
Mrs. Robert A. Raulerson
Mrs. Bryce D. Smith
Atty. Charles Solms III
Dr. David G. Stahl
Atty. James L. Wadleigh
Mrs. Mervin J. Weston
Prof. John D. Windhausen

Mr. Keith Martin, Director
Roberson Center for the Arts and Sciences
30 Front Street
Binghamton, New York 13905

Dear Mr. Martin:

It is with the greatest pleasure that I write this letter to thank you and the Roberson Center for having instigated your seminar in research training this past August. I was fortunate in that the Goldman Quartet that I had been using in my own Title III project in the greater Manchester area was chosen to attend that seminar. This quartet is made up of four professional musicians who have played virtually hundreds of concerts in the greater Boston area under the auspices of Young Audiences, Inc. over the years.

Last year was the first year we used a quartet in the sixty-eight primary schools involved in our project. I, personally, was quite pleased with the program they presented since it was patterned after the Young Audiences performances I had become accustomed to in the Boston area. However, after this quartet attended your seminar and had the opportunity to work with Mr. Kapp, they have prepared a lecture demonstration that is currently being viewed by 20,000 children in this area, that in no way resembles the presentation of last year.

The results of meeting fellow musicians with similar presentation problems has resulted in which I consider a presentation that is so unique in its approach that I venture to say our response is one hundred times better on the part of children and teachers this year than it ever was last year. We have created so much excitement among the educators in this state, that I anticipate taping this production with a live audience for our local educational channel. I might go a step further and say that on the basis of having seen this unique lecture demonstration, the New Hampshire Council on Better Schools has awarded the sponsoring school district, the Major Achievement Award in the state for 1967.

The credit for this achievement in part is due to the excellent work your organization has done in creating such a seminar.

continued..

148 CONCORD STREET MANCHESTER, NEW HAMPSHIRE 03104 TELEPHONE 623-0313/669-2731

Being in a prejudiced position, I am taking the opportunity to enclose an extract from the Executive Secretary of the New Hampshire Council on Better Schools to the local educational television station.

Sincerely yours,

A. James Bravar
Executive Director

AJB/bh
Enc.

COPY of parts of letter from Elenore Freedman, Exec. Sec'y. New Hampshire Council on Better Schools to Bruce St. George, producer of "Magazine" program, Channel 11, (dated 10/19/67) Durham, N. H.

"....The second typed piece of paper, enclosed, is a result of a terrific experience I had this morning, viewing the Goldman String Quartet perform for some grade school kids, in a corridor of an old battered school in Manchester. They are sensational and just a natural for a TV film. Frankly, what I want desperately to do is film their 45 minute program; edit the film to 30 min. and have Channell 11 use it, to the saturation point, both for in-school viewing by the kids in the rest of the state, and for evening viewing by parents and citizens. It is a marvelous, lively show. The kids are actively involved about one-third of the time; the four players have dynamic personalities that come acress; and, of course, they are all first class professional musicians. You'd have to pay lots and lots to get such talent on any TV program."

PHASE I OF PROJECT: ARTS IN EDUCATION

SUMMER CONFERENCE, 1968
Roberson Center for the Arts and Sciences, Binghamton, New York

SUMMARY REPORT

BACKGROUND: The 1968 Summer Conference was an outgrowth of the 1967 Pilot Conference at the Roberson Center. The Pilot Conference assembled performing musical ensembles, school educators and administrators, consultant-observers and audiences of children in an interaction workshop for the purpose of developing improved techniques of designing and presenting live musical performances for school children. Whereas the 1967 Conference was primarily concerned with methods of presenting and organizing such experiences, it raised questions about the possible measurement of what children actually derive from these experiences. These questions resulted in the 1968 Conferences which added a research team under the direction of Dr. Lambert Brittain from Cornell University to try and pinpoint areas of promise for subsequent measurement in a proposed on-going program under Roberson's direction.

PURPOSES OF THE 1968 CONFERENCE: Like the Pilot Conference in 1967, the 1968 session was intended to broaden the experience and insight of educators, performers, researchers and children alike by bringing them into an intense interaction situation in which the problems of each would be shared by all. The Conference Directors feel that the 1968 session was successful in contributing to a greater comprehension of musical experiences in a new dimension: an integral part of the school learning situation.

The current session began with the general question, "What happens when children and live musical performances interact?" This question led to others: "What are the implications of these experiences for the development of

1) the child's perceptual abilities
2) the child's verbal and non-verbal conceptual abilities
3) the manner in which the child regards himself and his own experiences
4) the child's ability to take the processes of experiencing music art form and apply them to other materials?"

The research team attempted to take the components of our situation, i.e., the musical work, the child and the performer and produce some preliminary indications of the feasibility of reducing the broad questions asked to researchable terms. A separate research report is available from the Roberson Center.

CONCLUSIONS OF THE CONFERENCE: Apart from the separate research findings, we conclude that

1) the interaction of participants is of substantial value in broadening each participant's conception of the role of live performances of musical works of art in the school curriculum.

2) this interaction produces substantial changes in the attitudes of performers, educators and children with respect to the values placed upon such musical experiences both within the school curriculum and generally.

3) the success of future conferences or on-going programs during the school year will be dependent upon:

    a) the musical, technical and verbal proficiency of the performers.
    b) the attitudes of the performers and educators, specifically their grasp of the broader implications of their own roles in relation to the performance of music.
    c) the most effective uses of the art form, specifically the use of inductive or "discovery" teaching techniques to encourage the child to internalize his experiences and make them his own.
    d) careful design which will take advantage of the potential for participants' growth by controlling interaction procedures.

Richard P. Kapp
Conference Director
7 August, 1968

RPK/tm

Roberson Summer Conference Workshop - July 1968

TO: Keith Martin, Director, Roberson Center

FROM: Robert J. Werner, Assistant Professor of Music, SUNY/Binghamton

RE: Implications for Music Education at all Levels

The primary emphasis in the conference seemed to be on the training of performers to present concerts of more meaningful value and substance to public school audiences. By so doing the conference stressed the importance of the "performer musician" having experience with and knowledge of the technique usually associated with the "teacher musician". This type of approach certainly underlines the present day emphasis upon a synthesis in the training and philosophy of all elements in the music profession.

The importance of the performer's own musical and professional self-image was stressed in the opening days of the conference. As with anyone who attempts to communicate his ideas and his values to others it is most important that he first clearly understands his own values and his function in the general music educational milieu. In this conference, as it almost always is, such attempts at self-understanding of the performer's role as both a musician and a teacher was an extremely "painful" process for most. At the same time, when the musician has sensed the direction and security that such an understanding gives him his enthusiasm for the program is multiplied manyfold.

In developing means of communication the conference stressed the importance for the understanding of musical concepts by the performer and his communication of these concepts to the listener. It appeared that the most successful presentations made use of what is commonly known as "the discovery method" or the Socratic method of dialogue and questioning between performer and audience. This approach made the participants aware of the great demands that are placed upon a teacher or performer who would use this method - since it requires of them great in-depth understanding of both the subject matter and general education to cope with the great variety of responses and to be able to improvise from these responses toward a determined objective in the presentation. These experiences and these needs that were felt by the participants seemd to re-emphasize the importance now being stressed in many professional circles of a common preparation in music for all sectors of the profession. For example, a B.M. degree including a strong minor in the liberal arts would be important to all phases of the profession as a basis for future work. With specialization in composition, education, performance, etc., coming at the post baccaleaurate level presumably leading to a Master's degree in one of these special areas of concentration.

In the communication of musical concepts we must be careful to pay attention to the nature of the art form itself, and that the concepts developed by the performers in their presentations be those indigenous to music. The effect of the understanding and grasp of these musical concepts may have a carry-over into other activities. However, our findings have not yet been sophisticated enough to prove this added benefit. Therefore, it would seem best to first develop perception of musical concepts before looking for their application in other areas.

Some other possible results of the conference which we only touched upon and which bear future consideration are:

1. Exploring the possibility of using public school ensembles at the high school level to make presentations within the district to grade school and junior high audiences. This would assume performing ensembles of high caliber, guided in their presentation and assisted by their public school teacher. It would be unrealistic for us to assume that all schools can afford the advantage of professional ensembles on a regular basis, so that the use of school ensembles for this work should be seriously considered.

2. Because of the importance of the individual in communicating and carrying out the type of work done in this conference I believe some research should be given to personality inventories of the performers to see what type of person seems to best communicate and develop the type of presentations important in this research. Perhaps some parallel between a personality inventory and musicianship might also be look for.

3. The development of the ability of communication on the part of the musicians is most obviously needed. The musician as a professional who deals with symbolism in a nondescriptive area often is stymied by communication in a verbal medium whether it be written or oral. Therefore, some consideration and training of the professional musician to communicate verbally, and to better understand the written word, should be a part of any continuing experiment in the development of the program.

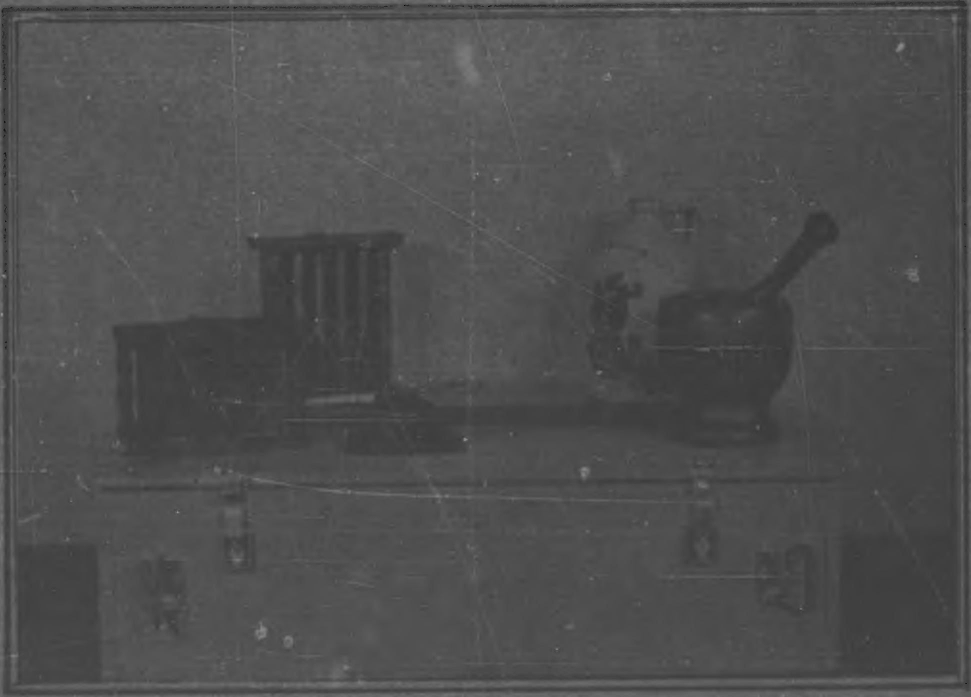
4. It is obviously important to consider the background of the audience. Some type of questionnaire should be developed in which the performers would know in advance the type of audience and their background that they were to prepare a program for. These questionnaires could be antidotal statements prepared by the classroom teachers, music teachers and the administration. This would be a great help to the performer.

The major conclusions of this conference for music education at all levels seems to be the implications that it has for college and public school curriculum. Thus, as indicated above, the need for in-depth background both in subject matter and in all fields pertinent to the use of the discovery method are necessary for the performer and for the teacher who would capitalize upon this type of presentation for the development of musical perception. It behooves us to look with a great deal more attention to the curriculum which prepares our music majors at the college level. This, in turn, would spell the need for a revized approach to the teaching of both performance and nonperformance music in the public schools. The entire emphasis of this conference was not performance ability of the audience, but rather as perceivers of musical concepts presented to them through performance of others.

Since the vast majority of our students will participate in the art of music as listeners for the major part of their lives and since there is some evidence to indicate that this more perceptive listening has influence on other areas of their lives we must begin to change the image of music education in the public schools and in many colleges who simply train the students as professional players. This over-emphasis on performance has placed our values in music education on contests, on the wearing of ribbons, and on applause as the measure of music education. The emphasis of this conference and the results that it showed in a limited way was that music can be more meaningful if communicated in a way which develops the understanding of the art form at its most basic conceptual level. In order to do this the conference has shown the need for performers and teachers to clearly articulate their objectives - to be able to think through their understanding of music and accurately describe the structure of its content. This need of the performer and teacher to verbalize and to understand is an extremely painful undertaking, but it has always been so and must be so in order that the performer-teacher can adequately communicate the concepts of music in all its facets. Knowledge must go hand-in-hand with understanding and music can bring this understanding to the listener at a non-discursive level which will enrich the child and his adult life. To this objective the conference has taken a major step. If the results briefly described here can be developed in greater detail in the future it has the potential of making a significant contribution to the profession.

Robert J. Werner

ROBERSON
TITLE III



CIRCULATING
SCHOOL
EXHIBITIONS

TITLE III ESEA CIRCULATING PACKAGED EXHIBITS

The exhibits described in this bulletin have been created at the Roberson Center over a period of three years; thus the earliest were designed and built well before the Title III project was conceived. Each has been designed to meet a felt need for genuine materials to supplement the curricula of the social studies and sciences.

In the two years and three months of our Title III operation, there have been 1,100 deliveries of exhibits to the schools in our eight-county area. Three parochial and three central school districts have had none while one system (Johnson City) has had 103.

At the present time, exhibits are loaned for one week. We suggest that systems with two or more schools attempt to schedule for two or three successive weeks, thus helping to reduce transportation costs. We anticipate dividing our large area into two or three segments and, where possible, distributing a given exhibit for a couple of months within each segment. This may mean that we will be unable to honor a few of the requests. It will be noticed, however, that our most popular exhibits have been duplicated.

Our scheduling is done currently on a "first come, first served" basis which will be somewhat altered next year, (see paragraph above) although those sending requests on the forms supplied prior to 28 June, 1968, will be scheduled before requests that are received later.

Currently, vehicles pick up and deliver on Mondays and Fridays. We anticipate no change unless we have to run on a third day--a distinct possibility.

Additional exhibits will, in all probability, be created during the summer. We will let you know about these through the regular newsletter, either in August or September. Any open dates will be called to the school's attention at that time.

Any damage or lost item should be reported to the Center (772-0660) as soon as noticed. When damage or loss is known to have occurred because of mishandling or lack of supervision in a given school, that school should be prepared to make up the loss.

All exhibits are distributed free of charge until 30 November, 1968. After that date, it is likely that we will be unable (or the Broome BOCES will be unable) to carry exhibits to and/or pick up exhibits from schools which have not budgeted for the expenses of distribution; therefore, the application form requires a principal's counter signature. It is hoped that systems with two, three, or four schools will find it possible to submit a single application form; with more than four schools in a system, it may be desirable to send two application forms.

All materials, labor, and incidental costs of assembly of all exhibits created since 28 March, 1966, and all costs of distribution until 30 November, 1968, have been borne by funds received by the Broome County BOCES under Title III of the Elementary and Secondary Education Act of 1965.

CIRCULATING SCHOOL EXHIBIT

SERIES No. 1

PREHISTORIC INDIANS

This exhibit is a self-contained plexiglas-faced folding case displaying and explaining artifacts and tools of the pre-Iroquois Indians of the Broome County area.

Illustrating what tools and utensils the Indians made and how they used them, the exhibit is concerned primarily with the Woodland-Owasco Culture, which immediately proceeded the Iroquois. The items included have been drawn lifelike from material recovered at the Castle Creek Site, excavated by the Broome County Historical Society in 1938-39.

The case size is 30 inches by 26 inches by 9 inches closed for traveling, and 60 inches by 36 inches by 4½ inches open for display. Total weight is approximately 60 pounds. The exhibit has a separate base and can be placed on any table 5 ft. or more in length. Soon to be added to this exhibit will be a small case that will contain Indian artifacts, such as those displayed in the larger case, for classroom use. We encourage the teacher to let the students handle the items from the smaller case.

It is recommended that this exhibit be used in Grades 3 through 8, and especially in the Seventh Grade, where Indians of New York are a study unit.

SERIES No. 2

PIONEER HOME LIFE

This exhibit consists of some fifteen to eighteen items, plus labels, individually packed, in a traveling case. The case size is 26 inches by 26 inches by 10 inches, with a hinged lid to which is attached a list of the case contents and a packing diagram. Approximate weight is 60 pounds.

This exhibit has been constructed with basically the Seventh Grade curriculum in mind, however, we recommend its use in Grades 3 through 8, wherever Pioneer Life is being studied or discussed. The exhibit illustrates tools and utensils typically used by new settlers in the interior New York frontier of 1790-1820. Materials and labels emphasize the aspects of self-reliance and local individual and sustenance level life. Included are items which the average frontier farmer could and did make at home, and utensils which can be hand-made by specialized craftsmen generally found in rural villages.

No display case is used. The exhibit may be unpacked and the items exhibited with corresponding labels on any table. Under supervision, children may be encouraged to examine and handle the objects. While antiquities, none are fragile or readily susceptible to damage.

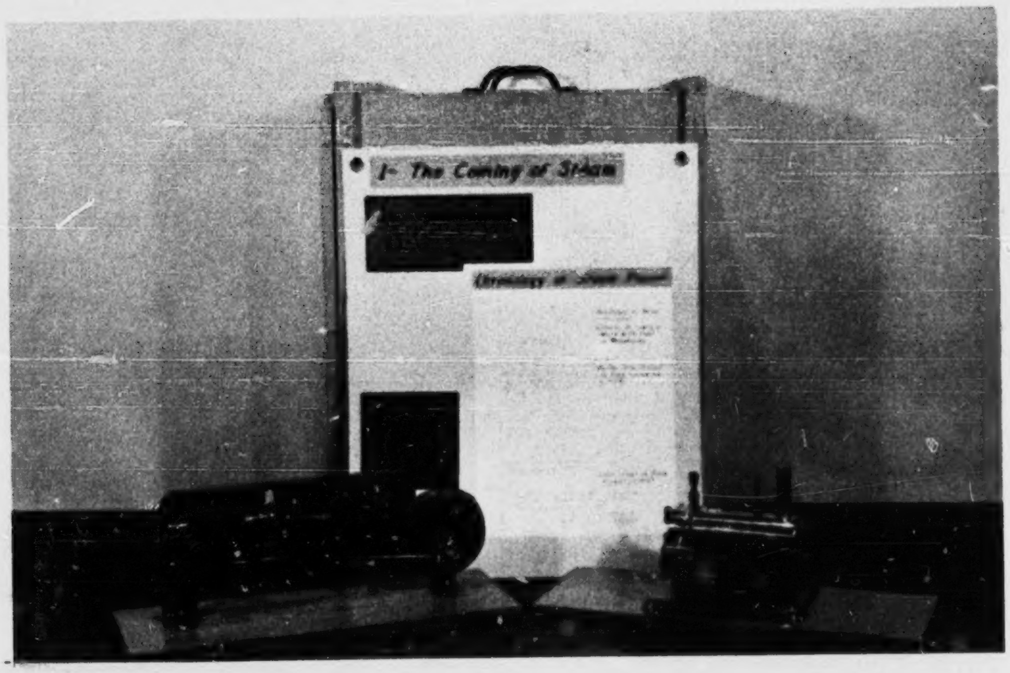


Exhibit Series #10 - The Coming of Steam

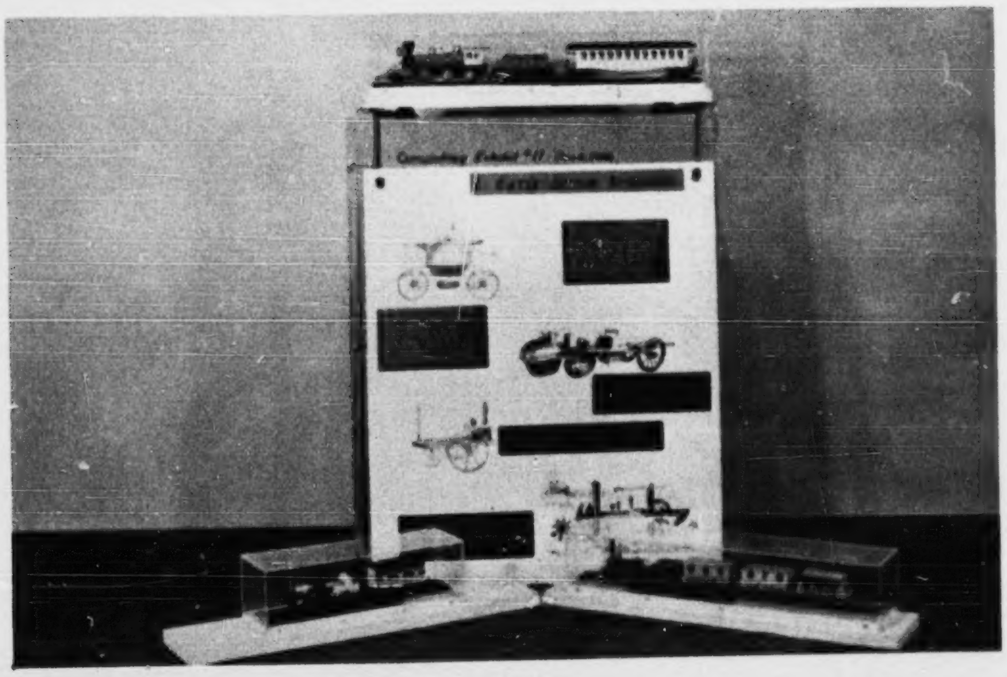


Exhibit Series #11 - The Development of Railroads

CIRCULATING-SCHOOL EXHIBIT

SERIES No. 3

ROCKS AND MINERALS

This exhibit is intended to explain the basic types of rocks which make up the Earth's crust, and the minerals which occur both in rock formations and individually.

Displaying and explaining about 100 basic rocks and minerals, the exhibit is arranged in four sections:

1. The Rocks, divided into Igneous, Metamorphic, Sedimentary Groupings, with explanations of each.
2. The Minerals; Metals and Metallic Ores, with emphasis on identifying not only the Ores, but explaining the various materials derived from them.
3. Minerals; Quartz and the Silicates; the many minerals which compose most of the Earth's surface.
4. Minerals; Non-Silicates.

Minerals are displayed and categorized in order of primary chemical content. The labeling and explanatory text, however, assume no prior student knowledge of chemistry or geology.

The exhibit case is a single unit, four sections, plexiglas-faced folding wood case. Case size is 25 inches by 33 inches by 9 inches closed for traveling and when open can be displayed on any table 6 ft. or more in length. Total weight is approximately 60 pounds.

A second case is included with the larger one in this exhibit. The smaller case includes 25 samples of Rocks and Minerals which may be used as classroom study specimens, and we encourage their use. We recommend this exhibit to be used in Grades 5 through 12, wherever Rocks and Minerals or General Geology is taught.

CIRCULATING SCHOOL EXHIBIT

SERIES No. 4

WHAT IS WEATHER?

Illustrating and explaining the natural phenomena which cause weather, this exhibit is concerned with the basic components of weather, such as cloud types, barometric pressure, wind, temperature, and other factors, and how they combine in frontal and storm systems. Particular storm types - thunderstorms and tornadoes, and hurricanes - are emphasized.

This exhibit also explains, very basically, how weather is forecast, from observations of current weather data at individual stations, through communications systems, to the plotting of charts and determination of overall weather systems and movements.

No prior knowledge of natural physics or meteorology is assumed, but this exhibit is not recommended for use below Grade 4.

The exhibit consists of material mounted on fourteen flat panels, each 24 inches by 31 inches in size. The panels are punched at the top corners for wall mounting, or they may be used loose, standing in a blackboard chalk tray or other base. Displayed in order, the exhibit will require a minimum of 28 running feet of wall space. The exhibit panels are contained in a traveling case 26 inches by 33 inches by 10 inches. Total weight is approximately 50 pounds.

A second case is included with this exhibit and this case includes such weather instruments as an aneroid barometer, hygrometer, cloud chamber, basic weather model as well as charts and maps. We strongly encourage the use of these weather instruments, maps and charts in the classroom when teaching weather.

The grade levels recommended are Grades 4 through 9.

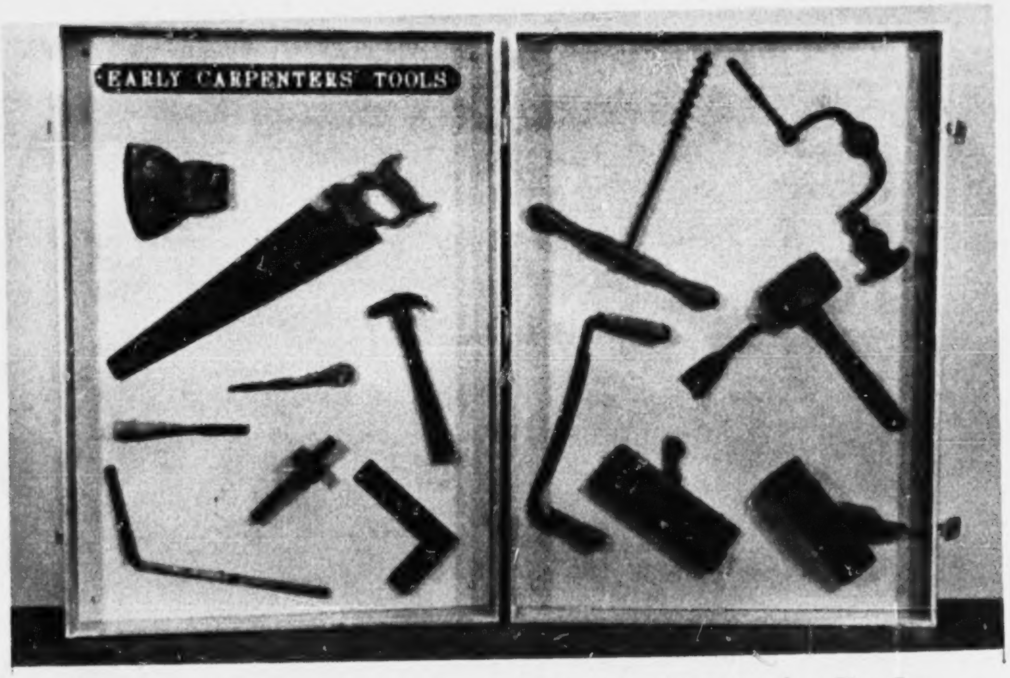

EARLY CARPENTERS' TOOLS

Exhibit Series #14 - Early Carpenter's Tools

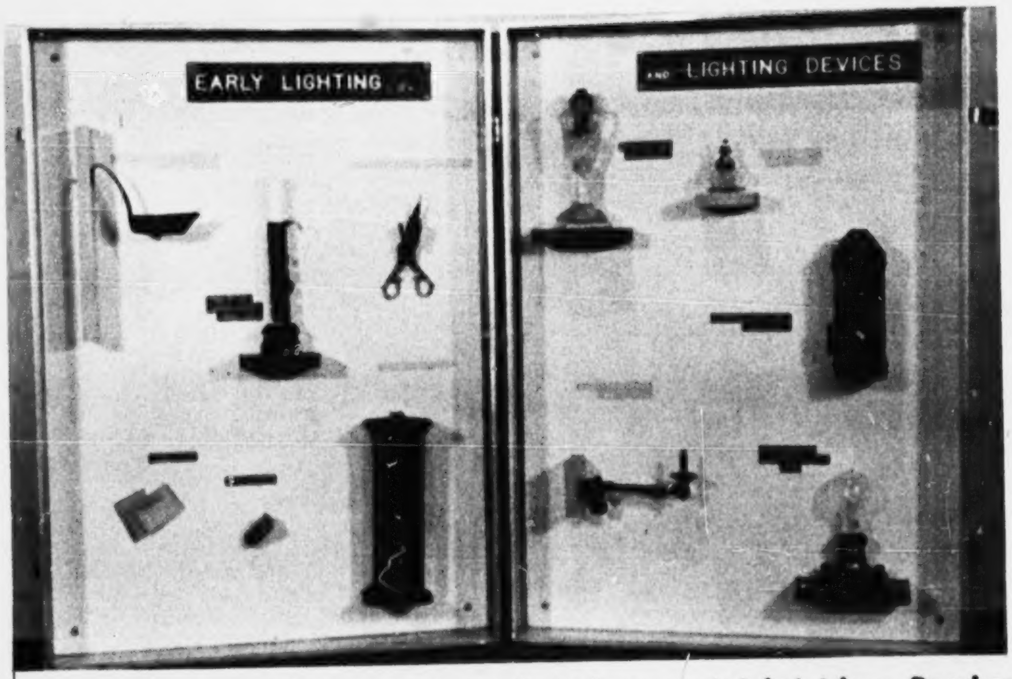

EARLY LIGHTING
AND LIGHTING DEVICES

Exhibit Series #13 - Early Lighting and Lighting Devices

CIRCULATING SCHOOL EXHIBIT

SERIES No. 5

THE CIVIL WAR

With examples of the basic arms and equipment carried by soldiers during our Civil War of 1861-1865, this exhibit illustrates and explains basically the causes of the war, the ways in which it was fought, and the ways in which it advanced and speeded up the industrial revolution and the growth of factory and manufacturing systems in the United States.

To illustrate the fact that the Civil War was in many ways a modern war, photographs show soldiers of the period and the great damage which occurred in southern cities, as well as the only known view of Lincoln delivering the Gettysburg Address in 1863.

The exhibit case is a three-unit folding case with each unit plexiglas-faced. Case size closed for traveling is 33 inches by 58 inches by 7 inches. The case may be opened and displayed on an 8 ft. table. Total weight is approximately 75 pounds.

SERIES No. 6

OUR NATIVE TREES AND THEIR WOOD

This exhibit illustrates and basically identifies the most common commercially used trees of the northeastern United States, and is designed to familiarize students with both the identification of trees, and with the characteristics of and differences in their woods. Included are illustrations of trees as they exist in nature, with details of their stems, leaves, seeds, or fruits, and blossoms. Drawings, and in some cases actual specimens, of winter twigs in bud, provide a reliable way of identifying trees during those months when deciduous trees bear no leaves.

Samples of the woods of approximately thirty common trees show the color and grain structure by which the wood can be identified alone. Explanatory labels cover the characteristics by which each wood is identified, and its past and present uses.

The exhibit materials are mounted on flat panels, each 18 inches by 24 inches in size. The panels, for chalkboard display or wall mounting, require about 18 running feet of wall space and are packed in a separate traveling case. Total weight is approximately 50 pounds.

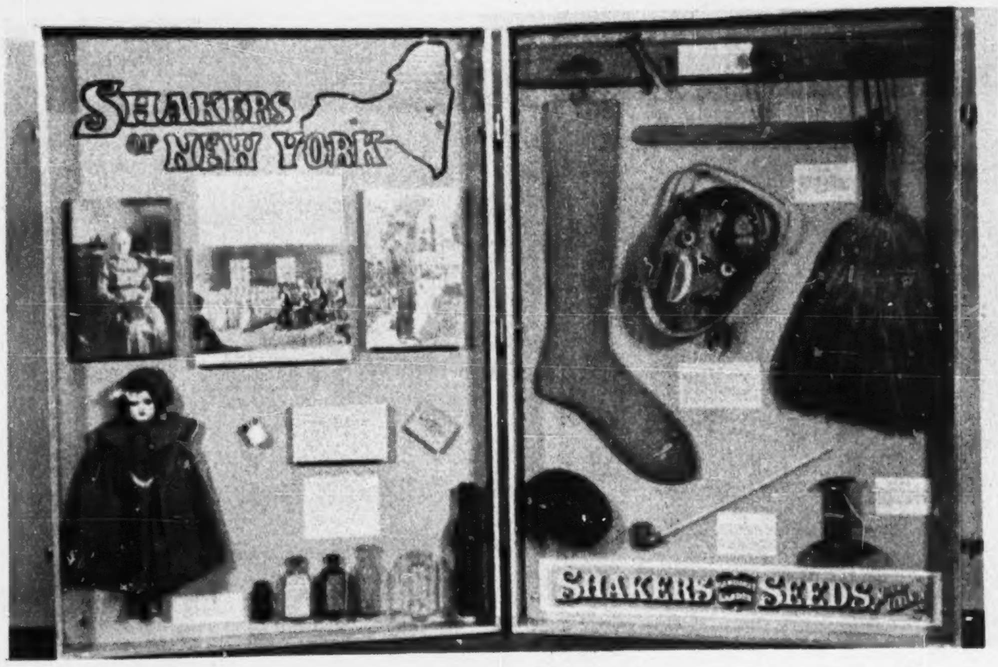

SHAKERS OF NEW YORK
SHAKERS SEEDS

Exhibit Series #15 - The Shakers of New York

Exhibit #15 - Shaker Items to Handle

CIRCULATING SCHOOL EXHIBIT

SERIES No. 7

FOSSILS OF SOUTH-CENTRAL NEW YORK

This exhibit is a self-contained, one piece unit that requires only one person for handling and card table space for exhibition. The case is made of aluminum and opens out exposing two plexiglas exhibition areas. The approximate weight is 30 to 40 pounds.

The sole purpose of this exhibit is to expose the viewer to the different kinds of fossilized life found here in south-central New York State. Specimens and descriptions are displayed in such a manner that it requires no formal knowledge of geology or paleontology, etc. We recommend this exhibit be used with the No. 8 Series, FOSSILIZATION, and in Grades 5 through 9, or wherever such a study unit is being taught.

SERIES No. 8

FOSSILIZATION - HOW FOSSILS ARE FORMED

This exhibit illustrates and explains the various processes by which ancient plant and animal life and remains are transformed in structure or mineral content, and preserved over great periods of geologic time.

The primary purpose of this exhibit is to explain how fossils are made. Displayed with the various specimens are charts and explanations of the fossilization processes.

We recommend that this exhibit be used with the No. 7 Series in Grades 5 through 9 or wherever such a unit is taught. The unit is approximately the same size and weight as exhibit number 7 above.

CIRCULATING SCHOOL EXHIBIT

SERIES No. 9

THE CHENANGO CANAL

This is a very small self-contained exhibit which employs the use of ten panels which may be hung in the classroom, or placed on a chalk rail. Visually the history of the canal is displayed through maps, charts and photographs.

The exhibit illustrates and explains very basically the Chenango Canal as a subsidiary of the Erie, and its importance as the primary transportation artery in the development of Binghamton and the Southern Tier of New York State. Five of the ten panels illustrate, with area photographs, the path of the canal within the City of Binghamton. Thus, this exhibit will be found most meaningful in Binghamton or Broome County.

However, we recommend this exhibit for use in the Seventh Grade Social Studies Curriculum, or in Grades 4 through 8, wherever a study of area transportation or local history is being conducted.

Traveling case size is 21 inches by 18 inches by 5 inches; with a hinged cover; total weight is approximately 20 pounds.

SERIES No. 10

THE COMING OF THE STEAM ENGINE

This exhibit includes in a traveling case, ten panels and two models, covering the history, development and technology of the reciprocating steam engine.

On a series of ten illustrated panels, the exhibit traces the development of steam engines from the earliest atmospheric engines of Thomas Savery and Thomas Newcomen, to final development of the reciprocating engines of James Watt and his successors. Included with the panels are a working cut-away model of a reciprocating steam cylinder, and an electrically heated working model steam engine. This exhibit is intended particularly for use in general science classes, though it will also be useful in connection with high school physics courses.

Traveling case size is 21 inches by 26 inches by 10 inches with a hinged cover. Total weight is approximately 65 pounds.

CIRCULATING SCHOOL EXHIBIT

SERIES No. 11

THE DEVELOPMENT OF THE RAILROAD

This exhibit consists of ten illustrated panels, for wall or chalk board display, tracing the development of steam railroads as a primary form of land transportation. The exhibit traces the development of the railroad from the earliest experimental steam powered vehicles of the 18th century through the work of such practical innovators as George Stephenson and James Stevens. The period of development of increasingly powerful and more effective engines is traced from 1830 to about 1875. Two panels also illustrate the effect of the railroad on the culture of the 19th century and the expansion of the western frontier.

With the panels are included three models of early engines, for table display.

Travel case size is 21 inches by 26 inches by 10 inches, with a hinged cover. Total weight is approximately 50 pounds.

SERIES No. 12

PRINTS AND PRINT-MAKING TECHNIQUES

This exhibit, intended primarily for high school art classes, by the use of original prints and engravings illustrates and interprets the various print-making techniques which have been employed by artists over several centuries.

The exhibit includes 20 framed prints, selected primarily to illustrate with clear and sharp impressions, the print-making techniques and their results. Samples included are wood blocks and wood engravings, and all of the more important engraving and etching processes.

The prints are mounted in aluminum frames, faced with plexiglas, and are packaged for traveling in a closed wooden case. Approximate case size is 36 inches by 22 inches by 12 inches; approximate weight is 150 pounds.

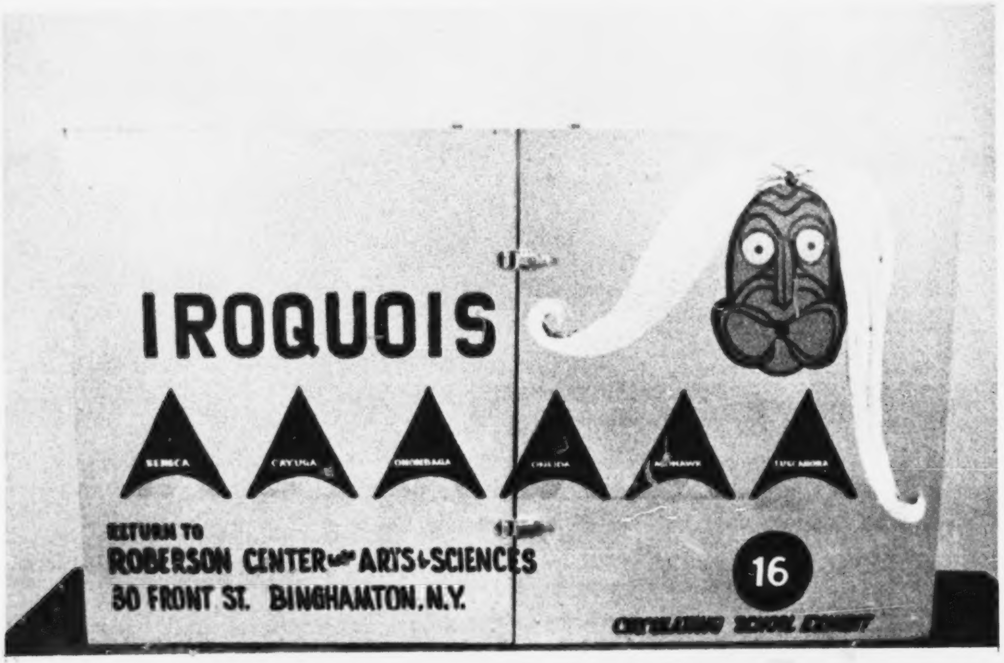

IROQUOIS
SENECA
CAYUGA
ONONDAGA
ONEIDA
MOHAWK
TUSCARORA
RETURN TO
ROBERSON CENTER ARTS & SCIENCES
30 FRONT ST. BINGHAMTON, N.Y.
16
CIRCULATING SCHOOL EXHIBIT

Exhibit Series #16 - The Iroquois

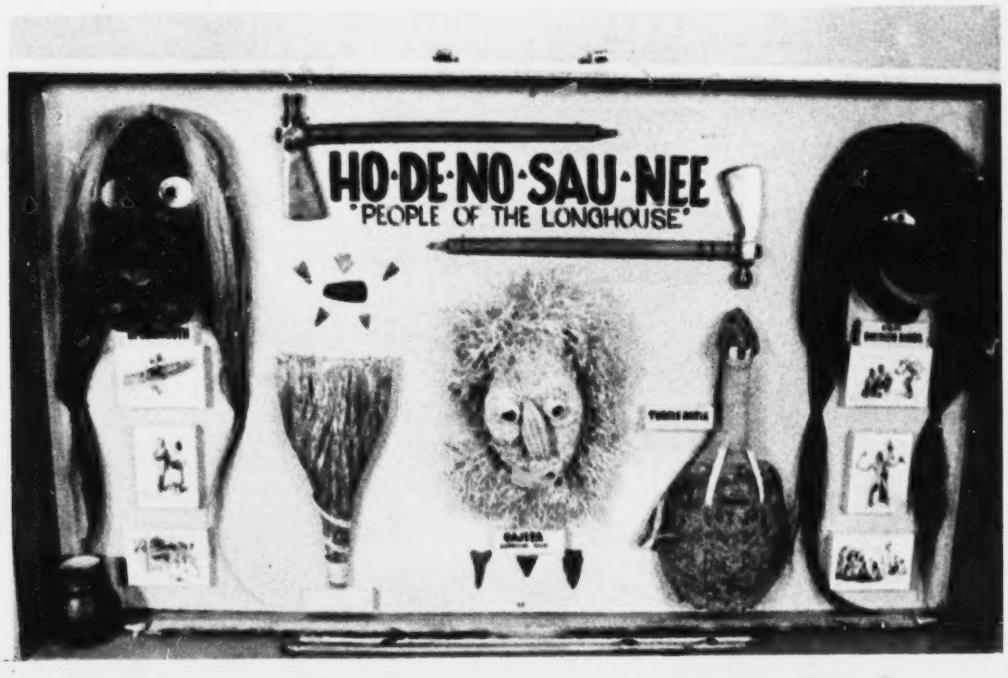

HO-DE-NO-SAU-NEE
"PEOPLE OF THE LONGHOUSE"

Exhibit #16 - The Iroquois - Center Panel

CIRCULATING SCHOOL EXHIBIT

SERIES No.13

LIGHTING AND LIGHTING DEVICES

This exhibit is a self-contained unit, completely housed in a single fold aluminum case. When opened for exhibition, about five feet of space is required. The weight is approximately 45 pounds.

When opened the case consists of two plexiglassed exhibition areas which contain labeled lighting devices displaying the history of lighting from the simple crusie to the first incandescent light bulb.

We recommend this exhibit for elementary and early secondary grade levels.

SERIES No.14

EARLY CARPENTER'S TOOLS

Housed in this self-contained, aluminum cased exhibit case are some of the tools used by the carpenter in the early and mid-nineteenth century, or the settling period in Central New York. A student may make a comparison with comparable tools of today.

When the exhibit case is opened, it requires only card table space for exhibition and it may be handled by one person. The approximate weight is 40-50 pounds. This exhibit is recommended for grades 3-9.

SERIES No.15

THE SHAKERS OF NEW YORK

The Shaker exhibit is delivered in two cases, one case being the single fold, aluminum, plexiglassed unit for display of items that cannot be handled. The second case is a chest type which contains several Shaker items, photographs, and samples of material, all of which are meant to be handled by the students.

Though the Shaker exhibit was designed as part of the seventh grade curriculum, where New York State and its people are studied, we suggest the use of the exhibit at any grade level where such groups are studied. With the labels and photographs there is enough printed material to give a basic understanding of who the Shakers were and their role in New York State.

Even though the exhibit is in two basic pieces, it can be easily handled and used by one person.

CIRCULATING SCHOOL EXHIBIT

SERIES No. 16

THE IROQUOIS

Of all of the circulating school exhibits in our present program, this exhibit is the only one that employs the use of reproductions. However, these reproductions have been hand made by reservation Iroquois Indians and extreme care has been taken to express authentically.

Due to demands for Iroquois material, brought about by the new unit of study in the seventh grade, we found it necessary to use these authentic reproductions. The real Iroquois artifacts, outside of arrow points and small stone objects, are extremely rare and valuable, and are usually found only in private or museum collections.

This exhibit is rather large and heavy and does require at least two adults to handle it. When closed, the case measures 64 inches by 34 inches by 10 inches and weighs approximately 90 pounds. A table measuring at least six feet is required for display.

In the near future, a small chest type of case will accompany this larger one and it will contain printed matter and some of the reproductions which may be handled by the student. We recommend this of course for the seventh grade in particular, but for any grade 3 through 8 as well.

SERIES No. 17

INSECTS

This exhibit is contained in a chest type case and in all practical terms is a loose exhibit, that is, the objects contained in the case may all be removed and used in the classroom situation.

These objects consist of sets of insects by order, contained in flat plastic covered trays, individual insects contained in round metal, plastic covered boxes, and two 16mm. colored films.

Examples of what are found in the tray containers are the beetles or Coleoptera, insects injurious to man and insects beneficial to man. We suggest that the insects contained in individual metal, plastic covered boxes be used as testing devices for they are only labelled with a number and the teacher will have a master list of the numbered boxes.

The two films included are entitled From Worms to Wings, the story of metamorphism, and the Biography of a Bee. Both films are from 15 to 20 minutes in length.

Recommended use of this exhibit is for any elementary or secondary grade studying insects.

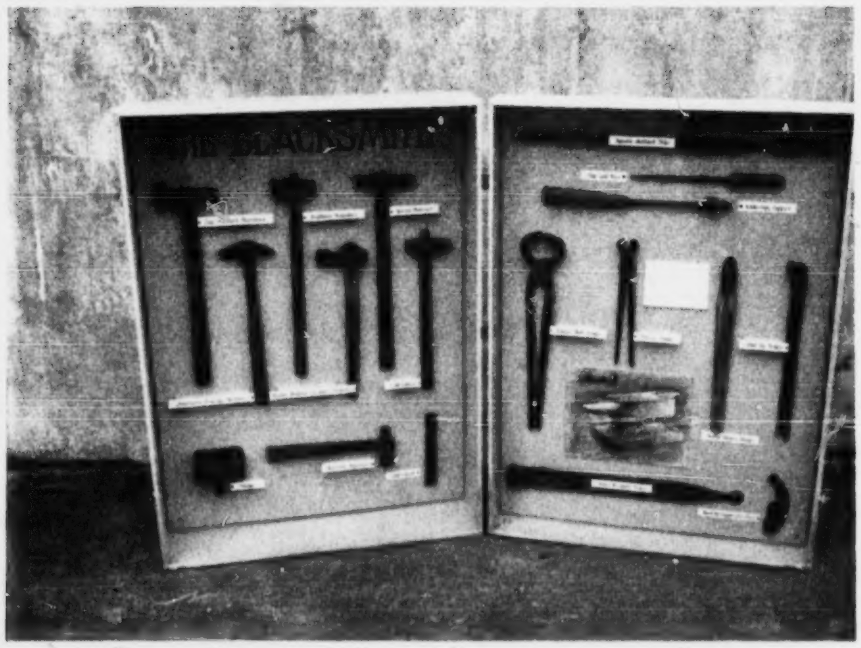

THE BLACKSMITH

Exhibit #20 - The Blacksmith

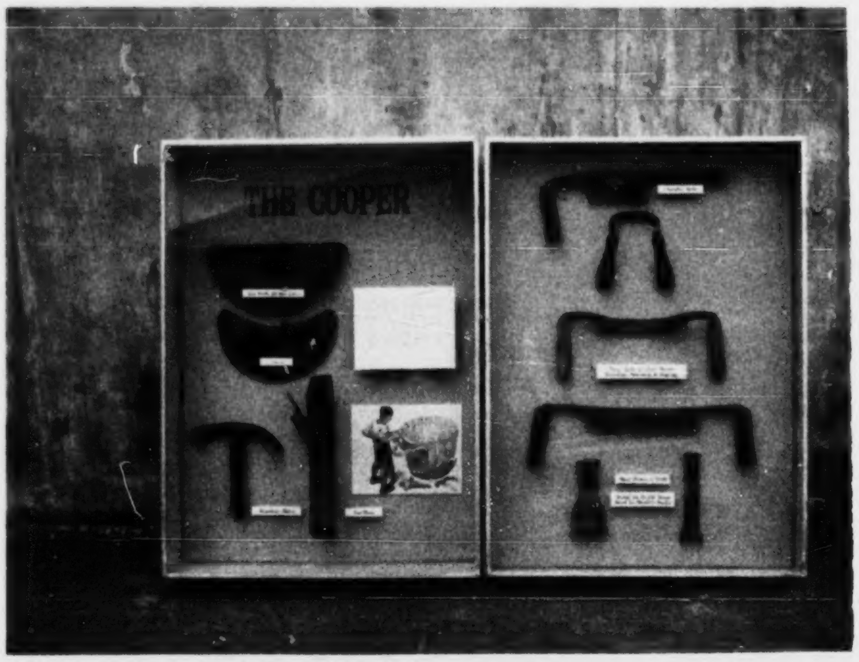


Exhibit #21 - The Cooper

CIRCULATING SCHOOL EXHIBIT

SERIES No. 18

ANIMAL KINGDOM SURVEY

The Animal Kingdom Survey Exhibit is a self-contained unit which holds 96 specimens in small jars of preservative, which in turn give examples of the entire animal kingdom from the very simplest forms to that of the complex mammal.

Although the individual specimens cannot be removed and handled by the student due to the danger of excessive breakage, the exhibit does, as its title suggests, offer a complete survey of the animal life found on earth.

The purpose of the exhibit is to make available these lab specimens for classroom observation to schools who do not already have them in their science labs.

We recommend this exhibit for use in the fifth through ninth grades.

SERIES No. 19

NOT AVAILABLE AT THIS TIME.

SERIES No. 20

THE BLACKSMITH

The Blacksmith Exhibit is another addition to our Pioneer or "Age of Homespun" Exhibits. It is rather simple to use in that it is a self-contained unit which opens out displaying those tools used by the now nearly extinct village blacksmith.

Our main concern here is to display the tools of a craft that was so closely related to the settling and expansion periods. The exhibit is primarily intended for use in the seventh grade, however, it can be used anywhere a unit on the pioneers or settlers is being studied.

SERIES No. 21

THE COOPER

The cooper, like the blacksmith, was a craftsman very essential to and closely related with the founding of our frontier. The cooper made barrels and generally was classified as a "wet" Cooper, if he made barrels to contain liquids or a "dry" Cooper if he made barrels to hold dry substances like grain, flour, etc.

Like the Series No. 20 Exhibit, the Cooper is self-contained and displays those tools used by the cooper in the manufacturing of barrels. As with The Blacksmith, we recommend its use in the seventh grade, or any where a unit on the settlers is being studied. We recommend that with these "Craftsmen" Exhibits the instructor use the book, The Colonial Craftsman by Tunis.

The work presented or reported herein was performed pursuant to a Grant from the U.S. Office of Education, Department of Health, Education, and Welfare. However, the opinions expressed herein do not necessarily reflect the position or policy of the U.S. Office of Education, and no official endorsement by the U.S. Office of Education should be inferred.